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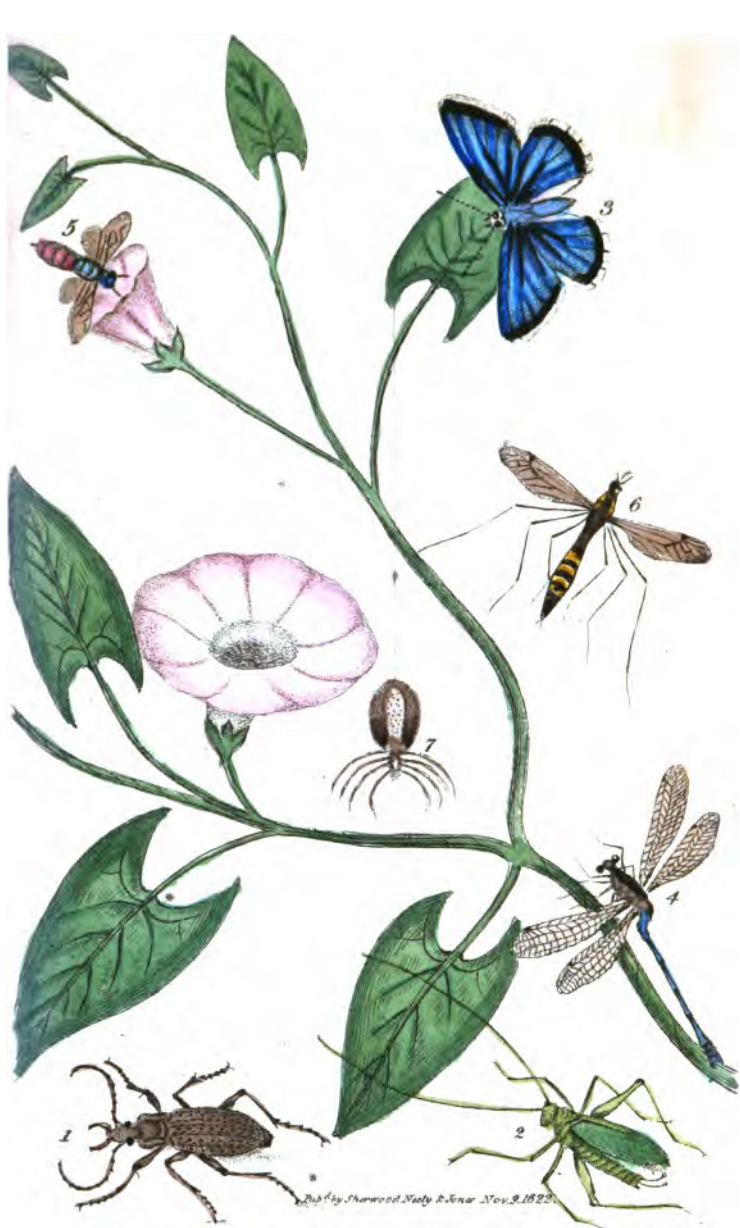


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**THE NEW YORK
PUBLIC LIBRARY**

**ASTOR. LENOX AND
TILDEN FOUNDATIONS**



Time's Telescope

FOR

1823;

OR,

A Complete Guide to the Almanack:

CONTAINING AN EXPLANATION

Saints' Days and Holidays;

WITH ILLUSTRATIONS OF BRITISH HISTORY AND ANTIQUITIES,

NOTICES OF OBSOLETE RITES AND CUSTOMS,

SKETCHES OF COMPARATIVE CHRONOLOGY,

AND

CONTEMPORARY BIOGRAPHY.

ASTRONOMICAL OCCURRENCES

IN EVERY MONTH;

COMPRISING REMARKS ON THE PHENOMENA OF THE CELESTIAL BODIES,

With an account of indispensable

ASTRONOMICAL INSTRUMENTS;

AND

THE NATURALIST'S DIARY;

EXPLAINING THE VARIOUS

APPEARANCES IN THE VEGETABLE AND ANIMAL KINGDOMS.

To which are prefixed,

An Introduction

ON THE HABITS, ECONOMY, AND USES OF

BRITISH INSECTS;

And an Ode to Time

BY BERNARD BARTON.

Second Edition.

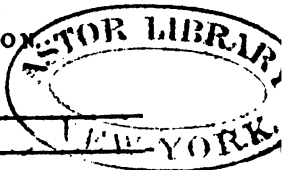
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1824.



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Notices of *Time's Telescope* for 1824.

'Time's Telescope is really so meritorious a work, that we cannot refuse it the meed of a willing gift,—unfeigned praise. Like its ten predecessors, this eleventh annual volume is an entertaining and well-selected miscellany from the good things of past literature, together with original productions of congenial character.'—*Literary Gazette*, Nov. 22, 1823.

'This work displays the same pleasing variety as was exhibited in the former volumes. It is one of those delightful books which is always welcome to us.'—*Literary Chronicle*, Nov. 29, 1823.

'In addition to the articles of information and amusement which the former volumes of this useful work contain, we are presented with a very elaborate essay on the "Outlines of Historical and Physical Geography." It appears to be accurate in its facts and reasoning, and is written in a pleasing style. Altogether, Time's Telescope is a work which deserves the highest patronage; and that it has received such patronage, is evident from the fact, that the present volume is quite equal, if not superior to its predecessors.'—*Literary Museum*, Nov. 29, 1823.

'This useful and agreeable little work, which is at once an annual and a perennial in the garden of periodical Literature, has now reached the eleventh year of its revival, and yet still appears under a new aspect. It is "another yet the same"—"an old friend with a new face"—and yet the better, instead of the worse on that account.'—*New Monthly Magazine*, Jan. 1, 1824.

'We have more than once noticed the former volumes of this very agreeable miscellany; and we must do the ingenious Editor the justice to repeat, that his eleventh volume is by no means inferior in point of merit or variety to its predecessors. The work is, indeed, kept up with great spirit, and no pains have been spared to render it as useful as it is entertaining.'—*Ecclesiastical Review*, Jan. 1, 1824.

'This volume, like its ten elder brethren, cannot fail of proving a very acceptable annual present. The Editor deserves commendation for considerable tact in selecting what is not only entertaining at the moment, but useful in affording solid information—and, what is highly praiseworthy, likely to lead the mind from Nature up to Nature's God.'—*Gentleman's Magazine*, December 1823.

'The number of Time's Telescope for the ensuing year is quite equal to its predecessors: there is no work of the kind with which we are acquainted, that contains such a variety of apposite and interesting matter: it is a work at once remarkable for ingenuity and industry.'—*Times*, Nov. 22, 1823.

'We have given the title-page of this work almost at full length, in order that those of our readers who were not induced by our account of the two preceding volumes (for 1822 and 1823) to form a personal acquaintance with it, may at once perceive its nature; and may be prepared by a bill of fare so very inviting to the mental appetite, for that feast of varied information and entertainment which it provides. The execution, we can assure them, does justice to the plan of this very interesting publication; and continues to be highly creditable to the elegant taste and literary diligence of the respectable compiler. We cordially renew our former recommendations of it, especially to young persons of education and intelligence.'—*Wesleyan-Methodist Magazine*, January 1824.

Notices of *Time's Telescope* for 1823.

‘If the times are not better, still it must be owned that their *Telescope* is improving annually. Indeed, we think this little work deserves peculiar credit for its constant variety, whilst still preserving the original plan on which it started.’—*New Monthly Magazine*, December 1822.

‘We have now had the gratification of approving the design and execution of this useful annual work for ten succeeding years; and can safely assert that the present volume is inferior to none of its predecessors. Novelty has been so studiously considered, that each volume is almost entirely a new work. The poetical selections are numerous and judiciously introduced.’—*Gentleman's Magazine*, December 1822.

‘We are acquainted with no annual work which has united so many suffrages in its favour as *Time's Telescope*. The present publication does not derogate from the character of its predecessors; but is indeed an agreeable and instructive miscellany.’—*Literary Gazette*, December 7, 1822.

‘This ingenious work is really worthy of public attention.’—*John Bull*, December 27, 1822.

‘This publication will convey, to young persons of intelligence and education, much entertaining and useful information, without that corrupting admixture of unsound principles, or improper allusions, by which so large a portion of the current literature of our times is unhappily debased.’—*Wesleyan Methodist Magazine*, Jan. 1823.

‘This is an entertaining and instructive annual work.’—*Courier*, December 24, 1822.

‘We have often had occasion to notice the periodical appearance of this useful work: in the variety and amusing quality of its contents, we know few works which can bear a comparison with *Time's Telescope*. We notice, with particular commendation, the poetical taste of the Editor, who has selected from the fugitive verses of the day many very beautiful and interesting specimens. The scientific department is got up with the same fidelity and cleverness which distinguished the former numbers of *Time's Telescope*.’—*Monthly Magazine*, Jan. 1823.

‘This is a very amusing book, and full of information on a variety of common-place topics, which people have in their mouths every day, and yet contrive to be profoundly ignorant of to the latest hour of their existence. History, antiquities, obsolete rites, biography, and a naturalist's diary, are only the prominent features of the work, which is as varied as it is amusing.’—*Museum*, June 7, 1823.

‘The sustained excellence and improving reputation of this agreeable and highly useful series, afford a gratifying illustration of the extent, depth, and richness, of the resources of English literature; and of the sure reward which attends the exercise of industry and judgment in exploring them. The present volume fully supports the character of its predecessors; and saying this, we are not aware that we could give it a higher praise.’—*St. James's Chronicle*, December 10, 1822.

Notices of *Time's Telescope* for 1823.

'Of all the annual publications of the present day, numerous as they are, there is not one that we long so much to see as *Time's Telescope*; for there is none, from which, in times past, we have derived greater pleasure and profit. Its reputation is now so fully established, that it stands in no need of any recommendation from us, or it should certainly have it. We scarcely know a work in which the *utile* and the *dulce* are more happily blended.'—*New Evangelical Magazine*, December 1822.

'This is a well-conducted annual work.'—*Morning Post*, December 19, 1822.

'Dr. Herschel, with his gigantic telescope of forty feet, could only examine the heavens, and trace the planetary orbs in their course; the author of *Time's Telescope* does much more, for he not only searches the starry heavens with microscopic ken, but spreads the whole earth before us, and penetrates to 'the waters under the earth.' Indeed, he unfolds the whole book of nature, and revels in its choicest productions. *Time's Telescope* has now attained a standing of ten years, during which time it has progressively increased in merit and reputation, presenting the same interesting variety, the same novelty, and the same good taste which first distinguished it. In short, it is a book which no person who wishes for amusement or information on a variety of subjects should be without.'—*Literary Chronicle*, December 7, 1822.

'This is an entertaining and instructive annual work.'—*Bell's Weekly Messenger*, December 29, 1823.

'*Time's Telescope* has certainly been furnished this year with an additional number of lenses, bright, clear, and achromatic; so that we are enabled to view, with distinctness and pleasure, the various objects that are set before us. Of the *natural pictures* here held up to view we can scarcely speak in too warm terms of commendation. The Introduction on the habits, economy, and uses of British Insects, is original and amusing; and the description of Astronomical Instruments is concise and clear. With the Ode to Time, by Mr. Barton, we have been greatly pleased, and indeed the whole volume is one which we can cordially recommend. The Editor is entitled to the highest praise for his laborious collections in poetry, biography, and the facts of natural history; the last is, at all times, a pleasing and delightful study, and which cannot be too much pressed upon the attention of youth. In a word, this is the best volume of *Time's Telescope* which has yet appeared.'—*London Journal of Arts*, December 1822.

'We have repeatedly recommended this work to our readers, who have a taste for scientific studies. The present volume contains a vast variety of interesting matter.'—*Supplement to Evangelical Magazine* for 1822.

'For the tenth time we meet this truly interesting compilation, which seems to improve with every recurring year, and may be justly said to afford a high intellectual treat to all who possess a love for literature and science. We know not a volume, indeed, even in the present productive state of the Periodical Press, which is

Notices of *Time's Telescope* for 1823.

so well calculated as this, to excite in the youthful and ingenuous mind a vivid and durable impression of the value of time, and of the beauty, sublimity, and utility of the mighty works of God. It is evidently the production of a man of great ingenuity and research; for he has contrived, notwithstanding an apparent necessity for repetition in some of the details, to give to each succeeding volume, and through every department of its contents, the charm of variety, and the impress of novelty; a result which he has been enabled to obtain through a very happy use of the almost inexhaustible treasures which are to be found in the mines of Philosophy and Natural History, in the delightful stores of Biography and Literary Anecdote, and in the curious *minutiae* of Manners, Customs, and Superstitions. With these he has mingled copious and judiciously selected illustrations from our best poets, living as well as dead; a feature in the work which stamps it with a lively and endearing interest, and which appears, indeed, in the volume before us, with singular attractions for our Suffolk readers, as it includes some highly finished effusions from the moral pen of one who resides amongst them (Mr. B. Barton), and who, whether regarded as a poet or a man, may be correctly said to reflect honour, not only on the sect to which he more peculiarly belongs, but on the country which has given him birth.'—*Suffolk Chronicle*, December 14, 1822.

'This work blends instruction with amusement, and presents a compilation of topics extremely well adapted to excite its younger readers to further research, and to create in them a desire of scientific and useful knowledge: it will amply repay a careful perusal.'—*Monthly Censor*, March 1823.

'The season which brings to us almanacks, souvenirs, diaries, and all the other thousand red and blue-vested remembrancers of Time, is again come round, and has duly brought to us one amongst those remembrancers, which we value far beyond its fellows, because it is of a more intellectual nature—we mean *Time's Telescope*. This work, which has now reached a tenth volume, does not, like many works which have been long continued, exhibit any signs of decay. On the contrary, it is carefully edited, and has received some improvements. In such a volume as this, where the same ground must be yearly travelled over again, it is no small merit to have avoided a wearisome sameness, and to have introduced so much of novelty. The selections, whether of prose or of poetry, are made with judgment, and combine utility with amusement.'—*Supplement to Arlies's Pocket Magazine*, December 1822.

Notices of *Time's Telescope* for 1822.

'To look back with advantage, and forward with pleasure, is the sum and substance of human happiness! Fortunate is he who can do so; and still more fortunate is he who has this little work to assist him in his retrospect and prospect, thereby giving an additional value to the time present. Whatever his pursuit, however multifarious his researches, he cannot fail of finding here both information and amusement, united to a degree of novelty and variety by no means to be expected in an annual publication of this kind. In this

Notices of Time's Telescope for 1822.

selection, good taste is evident; recapitulation has been avoided as far as possible, without omitting necessary information; whilst the author, without seeming to infringe in the slightest degree upon its contemporary utility, has with ingenious propriety rendered it specifically adapted to its place in the regular series of which it forms the ninth volume.'—*New Monthly Magazine*, Jan. 1822.

'With the return of this period of the year, we have to notice the recurring volume of *Time's Telescope* for the year 1822; for the character of which it might be sufficient to refer to our remarks on the previous volumes. We find the same industry and ingenuity displayed in the selection of anecdotes and facts appropriate to particular days, and the same good taste in the choice of the poetical pieces, thickly interspersed through the pages. It is unnecessary to say more of a work which has now passed several times under our notice, and whose merits are so fully substantiated as to leave the critic no further duty to perform.'—*Monthly Magazine*, Jan. 1822.

'We should have called this work *Time's Kaleidoscope* instead of *Time's Telescope*, for at every turn of a page it presents the reader with a new and agreeable combination of form, colour, and material. But, while it resembles, it also surpasses that curious instrument, inasmuch as its express object and tendency is to blend instruction with amusement, and to make the one as attractive as the other. We observe that the pages of this useful miscellany are diligently enriched from the leading publications of the times, which are referred to in a manner honourable to the parties quoting them, and valuable to readers who may wish additional information on the subjects thus brought to their notice. Taken altogether, *Time's Telescope* is one of the best productions to be put into the hands of youth which our teeming press sends forth. It leads by easy roads to improving studies; it is exceedingly various; it is full of hints for thinking, and it is honest and unprejudiced. From the child of five years of age to the mature of fifty, it will afford both entertainment and intelligence.'—*Literary Gazette*, Dec. 1, 1821..

'When so many attempts are made to corrupt the minds of the rising generation, through the medium of elementary books of instruction, it affords us pleasure to be able to recommend an attractive work, which is entirely free from the taint of bad principles. *Time's Telescope* is an agreeable miscellany, worthy of the attention of all classes of readers, but particularly of intelligent young persons, to whom it will convey much useful and entertaining information on the various subjects mentioned in its title. The whole is interspersed with numerous anecdotes, antiquarian references, historical facts, and poetical selections; admirably calculated to excite a taste for knowledge, and to render its acquisition easy and agreeable. We have looked through the volume, and are happy to find that, in a literary *melange* of so much extent and variety, there is so little to which persons of serious religion can object, and so much which they will cordially applaud.'—*Wesleyan Methodist Magazine*, January 1822, No. 1, Vol. 1, N. S.

'The style of this book is uniformly neat and appropriate. The information which the Editor gives on each subject is correct; it is

Notice of *Time's Telescope* for 1822.

ample, without being prolix; and it is occasionally enlivened by good extracts from our best poets. One thing more must be said of *Time's Telescope*,—it is a *safe* book; it may be put into the hands of youth, without the fear of its exciting an improper idea; and this is a quality of which the value must be felt by every parent and preceptor.'—*Artiss's Pocket Magazine*, Dec. 1821.

Notices of *Time's Telescope* for 1821.

'*TIME* flies so rapidly, that a *Telescope* becomes necessary to look at him when past, and is not less amusing to examine him as he approaches. *Time* also is that which we can never *reform*, but still we may improve it: and if it be a mark of wisdom to make the most of our time, it must be allowed that the Editor of the work before us has equally succeeded; for he has not only improved the past to make it useful for the present, but has also made the most of the future, by showing that *almost every day in the year is good for something*. He who wishes to know why one day is more remarkable than another? Why he must eat mince-pies at Christmas, or Pancakes on Shrove Tuesday? Why he must eat goose at Michaelmas, or be made a goose of on All-Fools-Day?—he who wishes to turn his *Telescope* on human events, or on the Heavens;—he who wishes to be directed, agreeably to the season, in his observations of nature, enlivened and illustrated by apt quotations from our best poets; or who, in short, wishes to know what time *was* and *will* be, cannot fail of gratifying his curiosity by a reference to this useful little parlour-window book. It has been before the public for some years, and is now considerably improved in arrangement, as well as in quantity; so that those possessed of former volumes will find that the present is far from being a twice-told tale: even if it were only for the very popular mode in which the interesting subject of Ornithology is treated, rendering it perfectly intelligible to youthful capacities, whilst older readers may find much that they have forgotten. In short, we wish it, and our readers, a happy new year!'—*Sun*, December 20, 1820.

'To young persons, either in town or country, this volume will be very acceptable, as it will furnish them, in one case, with much novel and amusing instruction; and in the other, will prove an agreeable guide to many of those pursuits which are the peculiar charm of a country residence. We know not any publication of a similar nature in which there is a better union of pleasure and amusement.'—*Monthly Magazine*, January and July 1821.

'*Time's Telescope* blends something of the character which belongs to the Literary Pocket Book with that of a general Almanack; but at the same time possessing features different from either of these and peculiar to itself, and being altogether much more useful and compendious than both.'—*Baldwin's London Mag.*, Feb. 1821.

Notices of *Time's Telescope* for 1820.

'*TIME*, not the world's Time, with wings besprinkled with cards, dice, and at "homes,"—but the Time of the Astronomer, the Naturalist, and the Historian, again opens his annual *Magazin des Ne-*

Notices of *Time's Telescope* for 1820.

beauties; and we can safely assure those who may wish to become purchasers, that all the articles in this literary bazaar are well selected, and of the first quality. This pleasing volume is well adapted for Schools, either as a class-book, or the reward of merit.'—*Gentleman's Magazine*, Dec. 1819.

'We hail with pleasure the annual re-appearance of *Time's Telescope*, which presents, in an easy, popular style, with judicious arrangement, clear and copious illustrations of almost every day in the Calendar, not only in regard to Saints' Days and Holidays, but also memorable events of the earliest times down to the passing year. The Naturalist's Diary for each month is interesting to all classes, for the specific information it contains, as well as for the pleasing view it affords of God's Providence at all seasons. He who takes up this little volume must be wiser, and perhaps better, before he lays it down.'—*Sun*, Jan. 18, 1820.

Notices of *Time's Telescope* for 1819.

'While this annual companion and guide retains the respectable character which now belongs to it, no parlour window, school room, or private study, can well dispense with its presence.'—*New Monthly Magazine*, Feb. 1819.

'*Time's Telescope* presents us with a new view of the ensuing year. To give variety to an almanack has long been considered as impossible; yet this ingenious little work, by means of recent or passing events, by an appropriate new selection of Poetical Illustrations, and by a new Introduction, offers an amusing novelty, without departure from its original plan.'—*Literary Gazette*, Dec. 12, 1818.

Notices of *Time's Telescope* for 1818.

'We cordially recommend this volume to the attention of persons of every age and taste, but particularly to the inquiring youth of both sexes.'—*Antijacobin Review* for December 1817.

'*Time's Telescope* for 1818 deserves the same praise, and is entitled to the same support and encouragement, which the former volumes have received from the public.'—*British Critic* for December 1817.

Notices of *Time's Telescope* for 1817.

'We have already noticed the preceding volume of this amusing and instructive performance; and we have now little to add to or deduct from the encomiums which we deemed it our duty to pass on the contents of that part, the plan being still the same, and the execution and arrangement as nearly as possible on the same model. We shall not consider it as requisite for us to continue our report of this annual publication.'—*Monthly Review* for August 1817.

'There is in this volume an excellent Introduction to the "Principles of Zoology," quite studded with poetical citations; and a copious index is added to the whole series. In point of quantity and quality, indeed, the present is fully equal, if not superior, to any of the preceding volumes; and our readers will not readily find a more attractive "*New Year's Present*" for their juvenile friends, which,

Notice of Time's Telescope for 1817.

while it acquaints them with the pleasing wonders of Nature, teaches them, at the same time, that all these "are but the varied God."—*Gentleman's Magazine for December 1816.*

Notices of Time's Telescope for 1816.

'Time's Telescope is compiled with skill and judgment, and contains much desirable miscellaneous information, and many interesting and instructive sketches, particularly on some parts of Natural History. We recommend this work to the attention of our juvenile readers, who will find it an agreeable and instructive companion.'—*Monthly Review for November 1816.*

'We are glad to see that the Editors of this useful work find encouragement to continue it annually, and that the articles it contains increase in their interest.'—*Gentleman's Magazine for August 1816.*

'A very entertaining and useful compendium of multifarious lore.'—*Eclectic Review for January 1817.*

Notices of Time's Telescope for 1815.

'We never met with a compilation better calculated for the use of families, and to serve as a portable companion for young persons, than this elegant little volume, which abounds with valuable information on subjects of general interest, and with a pleasing variety of rational entertainment. The book is written in a popular style, the articles are selected with great judgment from the best authorities; and while the scientific illustrations tend to quicken curiosity, the reflections interspersed with the extracts, occasionally given from the most charming of our poets, will increase the delight afforded by contemplating the works of nature, and raise the mind to a devout admiration of the Divine Author.'—*New Monthly Magazine, Jan. 1815.*

'The work before us supplies accurate, though popular, instruction on a variety of topics. It is written in a correct and tasteful style, enlivened by many exquisite quotations from the poets of the day; and is interspersed with such reflections as flow naturally from the conviction that knowledge, to be extensively beneficial, either to its possessor or to others, must be purified by religion, manifested in benevolence, and consecrated to God.'—*Eclectic Review for February 1815.*

Notices of Time's Telescope for 1814.

'This work contains a great variety of very useful information, conveyed in a most pleasing manner. We cannot hesitate to pronounce that it will be popular. It deserves to be so; and it has too many attractions, for every kind of taste, to be overlooked. It will form a delightful as well as instructive present for young persons at Christmas.'—*British Critic for December 1813.*

'We cheerfully give to Time's Telescope our warmest recommendation as a pleasing and safe book for the rising generation.'—*Eclectic Review for February 1814.*

Advertisement.

FRONTED, as we are, 'with many a goodly herald of our fame,' we have only to express the unfeigned pleasure we feel at the very flattering manner in which the fruits of our labours have been received; particularly manifested in the unprecedented sale of our last volume.

If, in the course of our yearly lucubrations, we have contributed something to the instruction of youth, or the amusement of maturer years;—if we have taught the mind to direct its regards towards the 'starry heavens,' and to read in those marvellous works the infinite wisdom of the Omnipotent;—if we have excited a taste for the study of Natural History, and have led our readers to contemplate the Beauties as well as the Wonders of Creation;—if, in a word, we have given birth to one sentiment favourable to benevolence, to virtue, and to religion,—we have done that, the consciousness of which will more than repay us for continued labour during the past, and unceasing attention towards the future.

It remains only to observe, that as each volume of **TIME'S TELESCOPE** is almost entirely a new work, and, at the same time, boasts some interesting features

ADVERTISEMENT.

peculiar to itself, the present volume is not deficient in such necessary attractions. Among these are, *Remarks on indispensable Astronomical Instruments, illustrated by wood-cuts; Popular Reflections on the Starry Heavens; an INTRODUCTION descriptive of the Habits, Economy, and Uses of British Insects; and an Ode to Time, written expressly for this volume, by our friend and contributor BERNARD BARTON.*

LONDON,
Nov. 16, 1822.

TO CORRESPONDENTS.

To our Correspondents residing in the counties of Huntingdon, Somerset, Gloucester, Suffolk, and Essex, we return our thanks for their valuable and ingenious communications, as well as for the kind interest they take in the success of our annual volume. To other friends and well-wishers who have contributed 'their mites to the general treasury,' we are likewise grateful.——N. B. Observations on the appearances of Nature in every month, in various parts of the kingdom, and curious and important facts in British Zoology, will be always acceptable: these should be addressed to the Editor, to the care of Messrs. Sherwood and Co., Paternoster Row, London; and transmitted before the 1st of August, 1823.

AN
ODE TO TIME;

WRITTEN FOR THE TENTH VOLUME OF TIME'S TELESCOPE

BY BERNARD BARTON.

I.

SPIRIT! if I may call thee such,
Beneath whose silent sway,
Structures, defying grosser touch,
In fragments fall away;—
Essence, or Shadow,—whatsoe'er
Thou art;—with mingled hope, and fear,
I frame this votive Lay:
For feelings I can ill define
With ev'ry thought of thee combine.

II.

I court no fabled Muses' aid
To scatter spells around;
For long before *their* presence made
Parnassus classic ground,
Thou from dark Chaos' depths didst spring
Elate—on thy expanded wing,
Which never since has found,
In all the boundless realms of space,
One moment's tranquil resting place.

III.

"LET THERE BE LIGHT!"—JEHOVAH said ;
And, with that Fiat, Thou,
Thy wings for instant flight outspread,
Becam'st—what Thou art now !
A viewless thing, whose very Name
Fancy's most daring flights may tame,
And furrow Wisdom's brow :
Given—and recalled—with vital breath ;
Thine entrance—LIFE !—thine exit—DEATH !

IV.

And yet that seeming Death, which tells
That we have done with Thee ;
And Thou no less with us ;—compels
Our Spirits still TO BE !
And parting from Thee does but seem
Like launching from some shallow stream
Into a soundless sea,
Upon whose thought-o'erwhelming brink
Thy *Cent'ries* into *Moments* shrink !

V.

But to that soundless, shoreless deep
I now must bid adieu !—
Enough it is for me to keep
My subject theme in view ;
And all-sufficient is thy spell
To wake more thoughts than tongue can tell,
Or fancy can pursue :
For, short of "THINGS ETERNAL," thine
Must closest round our hearts entwine.

VI.

Our human hopes, our human fears,
In Thee and Thine have birth;
And, by their varied smiles and tears,
Evince Thy present worth;—
In truth, 'tis Thy engrossing "Now"
Which gives to ev'ry thoughtless brow
Its fickle gloom, or mirth:—
All Sense can feel, or hear, or see,
While Sense endures,—is found in Thee.

VII.

What is the haughtiest Despot's power
Contrasted with Thine own?
He sways his sceptre of an hour,
And fills his transient throne:—
Thou sweep'st the empty pageant by;—
A moment—and to mortal eye
His place no more is known!
And one brief line records his Lot,
"He WAS!—and now on Earth is NOT!"

VIII.

The *works of Man* confess, by turns,
Thy mute, resistless sway;
Tow'rs, temples, pyramids, and urns,
Before Thy touch decay:—
At Man's command they rose on Earth;
Awhile they tell who gave them birth;
Then mingle with his clay!
And vague Tradition, in despair,
Can but conjecture what they were.

IX.

Nor less is Nature's every grace,—
Romantic, grand, and rude,
As thou pursuest thy forward race,
By Thee destroyed,—renewed :—
Leaves bud, and fade ; flowers bloom, and die
Suns rise, and set ;—by stars on high
Their courses are pursued :—
All *seem*, indeed, the same to be,
Yet find incessant change in Thee.

X.

Even the vast and wondrous Deep,
Where Navies come and go,
Which, whether lulled in dreamless sleep,
Or foaming to and fro,—
Appears just what it was of yore ;—
This, too, is changing evermore,
With every ebb, and flow ;
And, seeming to defy Thy power,
In essence varies every hour.

XI.

But what avails it to recal,
Or dwell on truths so trite ?—
Vicissitude awaits on all,
As day succeeds to night ;
And nothing in Creation's range
Escapes thy transmutations strange,
Or robs Thee of thy right :—
Whilst Thou, with cold, unaltered mien,
Remain'st—what Thou hast ever been.

XII.

This annual offering at thy Shrine

May well thy power attest ;

“ Precept on Precept, Line on Line,”

By Thee are here imprest !

Man is, indeed, thy Chronicler,

But Thou—thy varied Calendar

Canst still interpret best ;

And Contemplation must impart

Its moral uses to the heart.

XIII.

Unto her pensive, musing eye

Each feast, or fast—appears

A fruitless effort to defy

The silent lapse of years :—

And yet some soothing thoughts are blent

With such a transient monument ;—

And noblest hopes and fears

By turns elate, and awe the soul,

As we thy records thus unrol.

XIV.

Such fears and hopes may well engage

Our thoughts, in turning o'er

Thy brief OBITUARY PAGE,

Its annals to explore :—

There, each succeeding year, we find

The exit of some mighty mind,—

Whose rich and varied store

Fulfilled the purposes of Heaven,

For which its ample wealth was given.

XV.

There too, perchance, are found enrolled

Some scarcely known to Fame ;

Of whom, though little can be told

The World's applause to claim,—

A brief inscription points the lot,

And for a while keeps unforgot

Their Being's end, and aim !

“ The single talent—well employed,”

Redeems them from oblivion's void.

XVI.

And though that respite may be brief ;—

Though such may seem to share

The fate of Autumn's withered leaf,

And pass—we know not where !

Yet, while their cherished Memory lives,

Fresh strength to other minds it gives

Life's weary lot to bear ;

Unveiling to the mental eye

Hopes—feelings—thoughts—which cannot die.

XVII.

But not to Man ;—his death, or birth,—

Nor aught by him designed

To be his monument on Earth,

Thy records are confined :—

In them we trace the rise, the fall,

The ever-restless change of all

Mortality can bind ;—

And, while thy potent spell is shown,

See Power more glorious than thine own.

XVIII.

**The Power of HIM, whose mighty one
On Sea and Earth shall tread ;
With face all radiant as the Sun,
A rainbow round his head ;
Pillars of fire—his feet shall gleam ;
Dark clouds of heaven his vesture seem ;
His voice—a sound of dread ;
While thunders, echoing far away,
Shall publish thy departing sway.**

XIX.

**THEN the immutable decree,
So long by Heaven deferred,—
Shall, in the destined close of Thee,
Fulfil its solemn word :
Through boundless space, by thought untrod,
The DELEGATED VOICE OF GOD
Shall awfully be heard,—
Proclaiming, as foretold of yore,
“ THE MYST’RY FINISHED ! TIME NO MORE ! ”**

The various productions of NATURE were not made for us to tread upon, nor only to feed our eyes with their grateful variety, or to bring a sweet odour to us ; but there is a more *internal beauty* in them for our minds to prey upon, did we but penetrate beyond the surface of these things into their hidden properties.

PATRICK'S PILGRIM.

Is not the *earth*
With various living creatures, and the air
Replenished, and all those, at thy command;
To come and play before thee? know'st thou not
Their *language* and their *ways*? they also know
And *reason* not contemptibly: with these
Find pastime.

MILTON.

I cannot think he detracts from the state of the blessed, who conceives them to be perpetually employed in *fresh searches into Nature*, and to eternity advancing into the fathomless depths of the divine perfections. After an acquaintance of *many thousand years* with the WORKS of GOD, the beauty and the magnificence of the Creation must, doubtless, fill them with the same pleasing wonder and profound awe which ADAM felt himself seized with, as he first opened his eyes upon this glorious scene.

SPECTATOR, No. 626.

Introduction.

ON THE HABITS, ECONOMY, AND USES

OF

BRITISH INSECTS.

And God made every thing that creepeth upon the earth, after his kind.—GEN. ch. i, v. 25.

We admire the turret-bearing shoulders of the elephant, the neck of the bull, and its power of tossing aloft with fury its enemy, the ravages of the tiger, and the mane of the lion. But it is not in these instances that Nature appears most admirable: her wisdom is no where more conspicuous than in her minutest works.—In these beings, what power, what unfathomable perfection, is displayed!

PLINY.

INSECTS, though inferior in size, far surpass in variety of form, beauty of colouring, and singularity of structure, all the larger tribes of animals; but so prone is man to regard with contempt those parts of the creation which are diminutive, that insects have been almost overlooked in his searches after knowledge. His ignorance, the consequence of this contemptuous neglect, has led him to consider the whole class as of small importance, and as forming a useless, and, in many cases, offensive and injurious tribe of beings. Such, however, can be the language only of ‘haughty ignorance;’—the modest observer of Nature, although he may have learned little of the habits, economy, and uses of insects, particularly of those which abound in his native country,—will acknowledge that they have been created with *design*, and will not doubt that the design was *benevolent*.

Let no presuming impious railer tax
Creative wisdom, as if aught was formed
In vain, or not for admirable ends.
Shall little haughty ignorance pronounce
His works unwise, of which the smallest part
Exceeds the narrow vision of her mind?

Not only from the weak and unenlightened, but from the philosopher too, who has studied and admired the more stupendous acts of the Creator, the entomologist has often met with derision, and with ridicule, for examining the structure, the instincts, and the arts of a spider, or a fly. But what is size in the all-comprehensive eye of the Universal Architect? As, with respect to time, a thousand ages are to him but as a day, and a day as a thousand ages; so, with respect to space, the orbit of a world is as the speck occupied by a puceron, or the hundredth part of a drop of water, in which a monocus can live, and move, and swim. The same wisdom that ordained the revolution of the planets, was requisite to form the butterfly or gnat; for nothing short of infinite skill could have contrived the spiral trunk of the former, to suck up, as with a syringe, the honey of the full-blown flower, or its elegant colourings, composed by an infinite number of minute, variously-painted scales, artfully arranged; and nothing less could have endowed it with instincts for depositing its eggs on plants, or in situations best adapted to secure the birth, and to furnish with food the embryo caterpillars. Why, then, should we depreciate any part of Nature's works, or cast an opprobrium on the study of any of its branches?

The general opinion that insects act a less important purpose than any other tribe in the economy of Nature, and that the study of the science of Entomology has conduced but little to the benefit of mankind, is founded in ignorance alone. *Blights*, both in our orchards and corn-fields, have almost universally been attributed to some peculiar action of

the elements; but they are now discovered to be owing to myriads of *minute* insects, often of the puceron or tree-louse kind. Who can tell but that an accurate knowledge of the natural history of these insects may enable us to prevent its future depredations? And how often does our ignorance lead us to *destroy* insects as injurious, which are altogether harmless, and perhaps even serviceable to man? Although the multiplicity of insects is sometimes attended with no small injury to man as well as to animals, yet there is a counterpoise to this inconvenience;—myriads of birds daily devour ten thousand times their number of insects, both of the winged and reptile kinds. A bird in an instant of time swallows a fly; and, in the same instant, its life is extinguished, without feeling, perhaps, a single pang.

Insects are to be found in almost every situation,—in air, water, and in earth; in wood, and upon other animals; in decayed vegetables, and in putrid flesh. Their manners and their appearances are as various as their situations. The *eggs* of insects, like those of fish, in very few instances, require the care of incubation, but are left to be matured, and the young ones to be hatched by the genial influence of the Sun. The parents have generally paid the debt of nature before the young ones see the light. The care, therefore, with which the parent butterfly, or moth, selects the very plant which alone is capable of affording proper aliment to its infant caterpillar, cannot be the effect of instruction, experience, association, or the expectation of deriving pleasure from its progeny,—but must be attributed to an *original instinct*, implanted in it by the Creator, for the preservation of its species.

From the *egg* of the insect, in general, is not produced a young animal, similar in every thing but size to its parent, which is the case in the other classes, but a soft and humid animal, which is called the *larva*, or in English caterpillar, maggot, or sometimes

grub. The changes which this larva undergoes before its arrival to the perfect insect, vary in different genera. These changes are termed its *metamorphosis*. It is in this larva, or caterpillar-state, that the animal eats, and increases in size, occasionally casting its skin, and sometimes altering its colour. Its next change is into a harder and more compact state, called *aurelia*, or *chrysalis*, in which it remains torpid for a time, in many insects during the whole of the winter, and then, breaking its external covering, it launches into day a perfect animal, active, and full grown. In this state many insects eat very little, some not at all, but seem chiefly intent upon preparing for their future progeny. The life of most of them in this perfect state is very transient, only a short part of their whole existence¹.

As we have, on a former occasion², spoken at some length on the great importance of the *Study of Entomology*, especially as it regards the *uses of insects*, and have also treated of their instinctive powers and sensations—their external organs—their egg state and transformation—their habitations and food,—we shall now proceed to describe a few of the most remarkable of our BRITISH INSECTS, including such as have not been noticed, or only slightly referred to in our previous volumes; classing them under the arrangement of LINNÆUS, who has divided insects into seven orders, from the number and substance of their wings, or from their being altogether without wings.

ORDER I.—COLEOPTERA.

This order includes insects with crustaceous wings. These have four wings; the upper ones, which act as cases or coverings to the true wings, are called

¹ Dr. Skrimshire's *Essays on Natural History*, vol. i, p. 122.

² See the *Outlines of Entomology*, prefixed to *Time's Telescope* for 1820.

elytra; they are of a hard horny substance, and join or meet together on the upper part of the body, in a direct line or suture. The true wings, which, when the animal is in a state of rest, are under the elytra, are membranaceous, and more delicate than the finest gauze: when the animal prepares for flight, the elytra are raised, and the membranaceous wings are unfolded, and spread out to the air. This order includes almost all the *different kinds of beetles*, the stercoraceous beetles, the water beetles, those that are found on trees, and such as skip about on the smaller plants and on flowers; indeed all the beetle tribe, whose *elytra*, or outer crustaceous wings, cover the whole of the animal's body, are included in this order, and no others. There are above a thousand different species of beetles in Great Britain.

Most of the larvæ or grubs of the beetle tribe (*scarabæus*) live entirely under the surface of the ground, feeding on the roots of plants, &c. Their pupa or *chrysalis* generally lies dormant in the earth till the perfect insect bursts out.

The eggs of the cock-chaffer (*scarabæus melolontha*) are deposited in the ground by the parent insect, whose fore-legs are very short, and well calculated for burrowing. From each of these eggs proceeds, after a short time, a whitish worm with six legs, a red head, and strong claws, which is destined to live in the earth under that form for *four years*, and there undergoes various changes of its skin, until it assumes its chrysalid form. These creatures, sometimes in immense numbers, work between the turf and the soil in the richest meadows, devouring the roots of the grass to such a degree, that the turf rises, and will roll up with almost as much ease as if it had been cut with a turving-knife: and underneath, the soil appears turned into a soft mould for above an inch in depth, like the bed of a garden. In this the grubs lie, in a curved position, on their backs, the head and tail uppermost, and the rest of

the body buried in the mould. Such are the devastations committed by the grubs of the cock-chaffer, that a whole field of fine flourishing grass, in the summer time, became in a few weeks withered, dry, and as brittle as hay, by these grubs devouring the roots, and gnawing away all those fibres that fastened it to the ground, and through which alone it could receive nourishment.

The larvæ, having continued *four years* in the ground, are now about to undergo their next change: to effect this, they dig deep into the earth, sometimes five or six feet, and there spin a smooth case, in which they change into a *pupa* or chrysalis. They remain under this form all the winter, until the month of February, when they become perfect beetles, but with their bodies quite soft and white. In May the parts are hardened, and then they come forth out of the earth. This accounts for our often finding the perfect insects in the ground. The most efficacious mode of *preventing their increase* is to employ proper persons to take the flies in May and June, before they have laid their eggs; which, though it appears an endless task, may be done with very considerable effect, by shaking and beating the trees and hedges in the middle of the day. Children will be able to do this, and, as has been proved by experiment, will, for a trifling reward (suppose a penny a hundred), bring some thousands per day gathered in a single village. Domestic fowls of all kinds are particularly fond of these beetles, so that the expense of collecting them would be fully compensated by the quantity of food they would afford in this way.

When land is ploughed up in the spring, if the weather be warm, hundreds of the chafer grubs are exposed, in which case, *rooks, gulls, and jays*, will be sure to detect and devour them. These birds, therefore, should not be driven away, as the occasional damage they may commit is amply repaid by

their unceasing exertions to destroy various insects. The almost sole employment of *rooks*, for three months in the spring, is to search for this sort of food, and the havoc that a numerous flock makes amongst them must be very great.

The rose-chafer (*s. auratus*) is one of the most beautiful of our English insects of the beetle tribe. The upper parts of the female are of a shining green colour, marked transversely on the wing cases with a few short white or yellowish lines. The male is of a burnished copper colour, with a greenish cast. These insects are somewhat more than an inch in length: they are found on flowers, particularly on those of the rose and peony.

The bronze wood-beetle (*s. morbillosus*) forms *fig. 1* in our *Frontispiece*. This most beautiful insect is but rarely met with in England. The great stag-beetle (*lucanus cervus*) is the *largest* of the beetle tribe found in Great Britain, being often nearly three inches in length. Its colour is of a dark brown, except the jaws, which are sometimes as red as coral, and give to it a very beautiful appearance: by these, which somewhat resemble in form the horns of the stag, it is readily distinguished from all our other insects. The stag-beetle is very common in some parts of the south of England, in oak and willow trees, in the stumps or about the branches of which they remain hidden during the day; flying abroad and feeding on the leaves only in the evening. The month of July is the time during which they are principally seen. The males, in particular, have great strength in their mandibles or jaws; and with these they are able to pinch very severely.

The bacon dermestes (*d. lardarius*), one of the most destructive of its tribe, is produced from a maggot, which is bred and nourished in bacon, or in other animal substances. To collections of dried and preserved animals, they are sometimes particularly injurious. They change their skins several

times. These skins continue stretched out, as if blown up, and in appearance like the little animals which cast them. In order to undergo their transformation, the larvæ search out some convenient retreat; generally finding one amongst the wreck of the substances which they have gnawed. They do not continue in their chrysalid form more than about three weeks or a month. A remedy against the ravages of the *larvæ* of the dermestes (for it is not the perfect insect which commits so much havoc among collections of Natural History) is mentioned by Mr. Wood (on the authority of M. Olivier), in his '*Illustrations of the Linnæan Genera of Insects*', lately published. Take quick lime, half an ounce; salt of tartar, one dram and a half; camphor, five drams; white soap, four ounces; arsenic, four ounces.—Dissolve the camphor in a sufficient quantity of spirit of wine, add the arsenic, the salt of tartar, and the quick lime, beat them together with the soap, and preserve the composition in a pot for use. Olivier was present, with several other naturalists, at the trial of this receipt. Of several birds inclosed in a box, some were subjected to this preservation. At the end of a year the same persons examined the effect, and found that where the remedy had been used the birds were whole and perfect, while the others were reduced to powder.

The death-watch, *ptinus*, so well known as being the cause of superstitious fears in the ignorant, by its watch-like *ticking*, belongs to the order COLLEOPTERA; it is often, however, confounded with a wingless insect (*termes pulsatorium*), which we shall describe under the order APTERA.

† We take pleasure in recommending these two interesting *pocket* volumes to the notice of our readers; the description of the different genera is concise but perspicuous, and the *plates*, of which there is one to every genus, are beautifully and *correctly* coloured after Nature; a very important feature in an introductory work on Entomology.

The *silphæ* are insects whose strong and disagreeable smell indicates the places they inhabit, and the substances upon which they feed; they, as well as many other insects, constantly absorb the putrid flesh and excrementitious substances, which might otherwise infect the air. Their instinctive faculty leads them eagerly to seek the dead bodies of small animals; and it is singular to see them, attracted from a considerable distance by the smell of a putrid body, associate in their enterprize, and combine their efforts, that they may peaceably enjoy the fruits of their labours. Corruption has scarcely commenced in a mole or a mouse, and the smell become offensive, before numbers collect together, and, gliding under the animal, work with great activity, removing the earth, till by degrees the body disappears, and is buried without our seeing the workmen, or observing how it is effected. Four or five of these insects will thus entomb a mole in less than twenty-four hours. When it is once completely under the surface, they enter the body, and feed without fear. Three or four insects, working in concert, have been known to drag under the surface the body of so large an animal as a mole in the space of *an hour*, so that no trace of it has appeared above ground¹.

The larvæ, which are born in corruption, are of a greyish white colour, with a brown head. The body has twelve divisions with a rusty scale between each. They have six small scaly feet attached to the three first rings of the body. The larva in due time buries itself in the ground, forms an oval cell, and turns to a yellowish chrysalis, from which in about three weeks proceeds the perfect insect. These, with the larvæ of flies, or *maggots*, may be justly called the *Scavengers of Nature*.—

¹ Dr. Shaw's *Zoology, Insecta*, part i, p. 51. See also Mr. Bingley's *Animal Biography*, vol. iii, pp. 126-130, for some curious particulars of this insectal undertaker.

The benefit which they produce by removing offensive matter, and thus converting the putrefactive particles, that would otherwise fill the air with infection and disease, into fresh animated beings, is incalculable. This offers a fit subject for the contemplative naturalist. He sees in it the beneficence, the wisdom, the contrivance of a gracious God.—What would otherwise breed pestilence, and vitiate the whole atmosphere, gives life and sustenance to thousands of happy beings, in whose existence we have fresh proofs of what has properly been called the ‘insatiable variety of Nature.’ It seems as if the Creator had said, every thing shall have its use, every spot shall have its inhabitants, all the world shall teem with life. To these active, useful animals we are indebted for the speedy removal of whatever would be noxious. No sooner has life departed from a beast of the field, than its carcase is visited by these devourers; and what would have lain weeks, perhaps months, gradually imparting to the air disagreeable odours and noxious qualities, is stripped to the very bones in a few days, and becomes no longer offensive or injurious. How seldom do we see dead birds, hares, rabbits, &c. in the woods or in the fields! It is because in woods, in thickets, and in fields, myriads of these insects are ready to revel in their carcases as soon as they have paid the debt of Nature.

Few insects are better known than the lady-cow or lady-bird tribe (*coccinella*). They are usually found on plants, where they repose with the legs concealed under the body of their *antennæ* or feelers, beneath the head. In the winter season they conceal themselves and become torpid, appearing again in the spring. On the benefits derived from this insect, see p. 248 of our present volume.

The corn-weevil (*curculio granarius*) is too well known to most farmers, from the devastations that it makes in their granaries. The parent insect lays

its eggs in grains of corn, probably one in each grain. Here the larvæ, on being hatched, continue for some time to live, and it is very difficult to discover them, as they lie concealed within. They increase their size, and, with it, their dwelling, at the expence of the interior or farinaceous parts of the grain on which they feed. Corn-lofts are often laid waste by these grubs, whose numbers are sometimes so great, as to devour nearly the whole of their contents. When the grub has attained its full size, it still remains within the grain, hidden under the empty husk. There, being transformed, it becomes a chrysalis; and, when it has attained its perfect state, it forces its way out.

The nut-weevil (*c. nucum*) is well deserving of our attention: it is the insect produced by the maggot residing in the hazel nut. Though every one is well acquainted with the maggot in the nut, yet the various changes through which it passes, the mode of its introduction into the nut, and its appearance in its complete or perfect state, are known only to those conversant in the history of insects. The weevil makes its appearance early in the month of August, and may then be found creeping about hazel trees. The female insect, when ready to deposit her eggs, singles out a nut, which she pierces with her proboscis, and then deposits an egg in the cavity. She passes on and singles out another nut, which she pierces in the same manner, placing an egg in it, and thus proceeds till she has deposited her whole stock in different nuts. The nut, not apparently injured by this slight perforation, continues to grow, and gradually ripens its kernel. When the egg is hatched, the young larva or maggot, finding its food ready prepared, begins to feast on the kernel. By the time that it is arrived at its full growth, and has nearly consumed the whole of the kernel, the natural fall of the nut takes place: the inclosed larva, not

in the least injured by the fall, continues in the nut some time longer, and then creeps out at the hole in the side, which it has previously made, by gnawing in a circular direction, and immediately begins to burrow or creep under the surface of the ground, till, having obtained the depth sufficient for its convenient residence during the long period of its winter concealment, it lies dormant for *eight months*, and then, casting its skin, commences a chrysalis of the same general shape and appearance with the rest of the beetle tribe; and it is not till the beginning of August that it arrives at its complete or ultimate form, at which period it casts off the skin of the chrysalis, creeps to the surface, and commences an inhabitant of the upper world¹. While in this state it breeds, and, like the major part of the insect race, enjoys for a short time the pleasures of a more enlarged existence. There is a very elegant species of the curculio (*c. auratus*) frequently seen during the summer months in fields and gardens. It is about a quarter of an inch in length, and of the most beautiful gold or silver-green colour, exhibiting, when viewed with the microscope, a covering of scales, shining with a strong metallic lustre.

The musk-goatchafer (*cerambyx moschatus*) is not very uncommon in many parts of England. It usually makes its appearance in the hottest part of July, and may be smelt at a considerable distance; and if taken and rolled up for some minutes in a handkerchief, will perfume it for the whole day. This insect measures about an inch and a quarter in length, and is of a fine dark green colour, with a slight gilded tinge on the upper parts—and sometimes a strong

¹ Dr. Darwin, in his Botanic Garden, thus beautifully expresses the egress of this insect from the cavity of the nut:—

So sleeps in silence the *Curculio*, shut
In the dark chambers of the caverned nut;
Erodes with ivory beak the vaulted shell,
And quits on filmy wings its narrow cell.

cast of blue or purple. It is chiefly found on willows or poplars, in the decayed wood of which its larva resides.

The common glow-worm (*lampyris noctiluca*), of which many poetical illustrations have appeared in our volumes (see also p. 247, *note*), may be observed after sunset, during the summer season, in meadows, by road sides, and near bushes. Among the crooked lanes, in every hedge, the glow-worm lights his gem, and

through the dark
A moving radiance twinkles.

They are most frequently to be seen during the month of June. In the day time they conceal themselves among the leaves of plants. Each sex is luminous, but in the male the light is less brilliant. The common or wingless glow-worm may be very successfully kept for a considerable length of time, if properly supplied with moist turf, grass, moss, &c., and, as soon as the evening commences, will regularly exhibit its beautiful effulgence, illuminating every object within a small space around it; and sometimes the light is so vivid as to be perceived through the box in which it is kept. Dr. Darwin, in his admired poem of the 'Botanic Garden,' commemorates the splendour of the glow-worm, among other phenomena supposed to be produced under the superintendence of the 'Nymphs of Fire.'

You with light gas the lamps nocturnal feed,
That dance and glimmer o'er the marshy mead;
Shine round Calendula at twilight hours,
And tip with silver all her saffron flowers;
Warm on her mossy couch the radiant worm,
Guard from cold dews her love-illuminated form,
From leaf to leaf conduct the virgin light,
Star of the earth, and diamond of the night.

The common earwig (*forficula auricularia*), though in its nature extremely harmless, except in our gardens to our fruits and vegetables, has fallen, in a very particular manner, a victim to human cruelty

and caprice, originating in the idea that it introduces itself into the ears, and from thence penetrates to the brain, and occasions death. We must be permitted to express a wish, that females, who but too commonly lay aside all ideas of tenderness at the very sight of it, would be convinced that the wax and membranes of the ears are a sufficient defence against all its pretended attacks upon this organ. Our gardeners have, it is true, some room for complaint. It lives among flowers, and frequently destroys them; and, when fruit has been wounded by flies, the earwigs also generally come in for a share. In the night they may often be seen in amazing numbers upon lettuces and other esculent vegetables, committing those depredations that are often ascribed to snails or slugs. The best mode, therefore, of destroying them, seems to be, to attend the garden now and then in the night, and to seize them while they are feeding. The bowl of a tobacco-pipe, and the claws of lobsters, stuck upon sticks that support flowers, are the usual methods by which they are caught, as, in the day-time, they creep into holes and dark places. Placing hollow reeds behind the twigs of wall-trees, is also a good mode, if they be examined and cleared every morning. But at a midnight visit, more may be done in an hour than by any of the other means in a week.

It may not, perhaps, be known to the generality of observers, that the earwig is possessed of *wings*, which are both large and elegant, and that one of these, when extended, will nearly cover the whole insect. The earwig, unlike most others of the insect tribe, hatches its eggs, and the young earwigs are fostered by the parent, in the same way as birds bring up their young.—(See some curious instances of this in Mr. Bingley's very entertaining and instructive 'Animal Biography,' vol. iii, pp. 150-151.)

ORDER II.—HEMIPTERA.

This Order includes all insects with half-wing cases; and they differ from the *coleoptera*, in the elytra being shorter, only covering half the body; in their being softer, more like parchment than horn; and, thirdly, in their inner margins wrapping over each other, and not meeting in a direct line or suture.

The common black cock-roach (*blatta orientalis*), which is frequently called in our metropolis, and elsewhere, by the erroneous name of the *black-beetle*, is supposed to have been first imported from the eastern parts of the world, and seems to have made great progress, of late years, in extending itself throughout the kingdom. This insect lives in crevices and crannies near our fire-places and ovens; and, like the cricket, comes out to feed in the night time. It eats flour, bread, and almost any kind of kitchen offal. In the night time, after the family has retired to rest, these insects and their larvæ of all sizes, which are whiter, and have only the rudiments of wings, come out by hundreds, and may be seen in all parts of the kitchen, particularly on the hearth. They are not, as was supposed, inimical to the cricket, but associate with it, and are very similar in their habits. As they prove a disagreeable pest where they abound, many arts have been practised for their destruction. The most effectual that we have seen, is the following:—Cover the outside of a deep glass or bason with cap paper (a common water glass, such as is introduced at table after dinner, will answer the purpose well); put some pieces of bread into it, and place it in a cupboard, or in any other place where the beetles are numerous; and in the morning you will find scores that have crept up the paper on the outside, dropt in, and from the polished surface, as well as from of the glass, have been unable to escape. Many crickets, as well as cockroaches, will be caught by this means.

The mole-cricket (*gryllus gryllotalpa*) is a complete representative of the mole among the insect tribes, and burrows under ground like a mole, raising a furrow as it proceeds. It is at once distinguished from all others, by the apt formation of its fore-feet, which are divided into several segments, or claws, spreading out like the palm of the hand, by means of which the insect is enabled to perform its instinctive functions in the most effective manner. It moves slowly, and never leaves its hiding-place till the close of the day. The female lays between two and three hundred eggs in an oval nest under ground, and is very careful of her charge till they are hatched.

The house-cricket (*g. domesticus*) is one of those busy little insects that reside altogether in our dwellings, and intrude themselves on our notice, whether we wish it or not. They are partial to houses newly built; for the softness of the mortar enables them to form their retreats, without much difficulty, between the joints of the masonry, and immediately to open communication with the different rooms. They are particularly attached to kitchens and bakehouses, as affording them a constant warmth.

‘Tender insects, that live abroad (says Mr. White), either enjoy only the short period of one summer, or else doze away the cold, uncomfortable months in profound slumbers; but these, residing as it were in a torrid zone, are always alert and merry: a good Christmas fire is to them, what the heats of the dog-days are to others. Though they are frequently heard by day, yet their natural time of motion is only in the night. As soon as it becomes dusk, the chirping increases, and they come running forth, and are to be seen often in great numbers, from the size of a flea to that of their full stature.

Around in sympathetic mirth

Its tricks the kitten tries;

The cricket chirrups in the hearth;

The crackling faggot flies.

' As one would suppose from the burning atmosphere which they inhabit, they are a thirsty race, and show a great propensity for liquids, being found frequently drowned in pans of water, milk, broth, or the like. Whatever is moist they are fond of, and, therefore, often gnaw holes in wet woollen stockings and aprons that are hung to the fire. These crickets are not only very thirsty but very voracious; for they will eat the scummings of pots, yeast, salt, and crumbs of bread, and any kitchen offal or sweepings. In the summer they have been observed to fly, when it became dusk, out of the windows, and over the neighbouring roofs. This feat of activity accounts for the sudden manner in which they often leave their haunts, as it does also for the method by which they come to houses where they were not known before. It is remarkable, that many sorts of insects seem never to use their wings but when they wish to shift their quarters and settle new colonies. When in the air they move in waves or curves, like woodpeckers, opening and shutting their wings at every stroke, and thus are always rising or sinking. When they increase to a great degree, they become pests, flying into the candles and dashing into people's faces; but they may be blasted by gunpowder discharged into their crevices and crannies. In families, at such times, they are, like Pharaoh's plague of frogs,—"*in their bed-chambers, and upon their beds, and in their ovens, and in their kneading-troughs.*" Cats catch hearth-crickets, and, playing with them as they do with mice, devour them.—Crickets may be destroyed like wasps, by phials half filled with beer, or any liquid, and set in their haunts; for, being always eager to drink, they will crowd in till the bottles are full.' A popular prejudice, however, frequently prevents any attempts at their destruction; many people imagining that their presence is attended with good luck, and that to kill or drive them away will surely bring some unfortu-

nate occurrence on the family. When these insects are running about a room in the dark, and are surprised by a candle, they give two or three shrill notes. These seem a signal to their fellows, that they may escape to their crannies and lurking-holes, for the purpose of avoiding danger.'

The field-cricket (*g. campestris*), of whose manners and habits the Rev. Mr. White, of Selborne, has given so interesting an account, will feed and thrive in a paper cage, if supplied with plants moistened with water, and set in the sun: the insect will then become so merry and loud, as to render it irksome to be in the same room with it. If the plants are not wetted, it will die.

The small insects, commonly called grasshoppers (see *Frontispiece*, fig. 2), belong to the genus *gryllus*, and must not be confounded with the *cicada plebeia*, which is a native of the warmer parts of Europe.

The white froth-like spittle, which is seen on the leaves and stalks of many kinds of plants in the summer season, is produced by the black-headed frog-hopper (*cicada spumaria*); and if this froth be wiped off and examined, it will be found to contain the larva or young of the cicada: and this matter, which is discharged from its own body, no doubt serves to protect it from the attacks of other insects.

The common bed-bug (*cimex lectularius*), we have every reason to believe, has been a domestic pest from time immemorial; at least, it is mentioned by some of the Greek writers, who spoke of the animal with feelings wholly independent of a taste for Natural History. Southall, a celebrated bug-catcher, who published a treatise on the subject in the year 1730, says, that the bug was scarcely known in England before the year 1670, when it was imported among the timber used in rebuilding the city of London after the great fire in 1666; but we have the authority of Mouffet to prove, that this troublesome insect was familiar to most persons long before the fire. In the

beginning of summer, says Dr. Shaw, it deposits its eggs, which are very small, white, and of an oval shape, each standing on a kind of short pedicle or footstalk, in the cavities of walls or wood-work¹. The young, which are hatched in a few weeks, arrive at their full size in about three months. In their winter retreats they can bear the most intense frost without injury; and are always ready, as soon as the warm weather returns, to take the field. Most of the species, when touched, have a very strong and disagreeable smell. They are met with in woods and shady places, &c., and many of them are very prettily marked.

Aphis is the generic name for those small insects that infest, at times, almost every kind of plant, and are called tree-lice, vine-fretters, or pucerons. The males are winged, and the females without wings: they are *viviparous*, producing their young alive in the spring; and also *oviparous*, laying their eggs in the autumn. As these insects derive their nourishment from the juices of the plant which they infest, Nature has wisely ordained that the females should lay eggs in the autumn, though they bring forth their young alive all the spring and summer months. This is to prevent them from being starved for want of food in winter. The young burst forth from these eggs in spring, as soon as there are leaves to subsist upon. The aphides are very noxious when in any great numbers, causing the plants which they infest to become sickly, and their flowers or fruits to be small, and not to come to perfection. They some-

¹ The best recipe for reducing the number of that troublesome insect, the *bug*, has been given to us by a gentleman who has frequently experienced its efficacy:—Dissolve three ounces of camphor in four ounces of ethereal turpentine, to which add four ounces of the purest alcohol. The bedstead should be taken to pieces, and the mixture applied with a camel's hair brush: care should be taken, however, not to suffer a candle or light to come in contact with the preparation.

times migrate, and suddenly fall in showers on spots that were until then free from their ravages. The gardeners have proposed several compositions for washing the infested trees; but plain water, dashed with force from a garden engine, will prove as destructive to them as any thing, when on trees; and smaller plants may be washed with tobacco water, with elder leaves infused in water, or with common soap suds, either of which will destroy the insects. We might, perhaps, effect much towards freeing our gardens from this pest, by encouraging the breed of such other insects as feed upon these tree-lice. The larvæ of the lady-bird eat thousands of them; some species of ichneumon and common ants also destroy them; it would, therefore, be well worth the experiment to learn more of the habits of these insects, particularly to discover whether they are themselves injurious to gardens, and then to introduce such of them as are innocuous to the spots that are infested with the lice. It would probably prove serviceable to scatter ants, which may always be procured in abundance, upon the infested trees, with this view. The aphides sometimes settle upon the tops of beans, covering them so thickly, as to make them appear quite black: in such cases the crops may often be preserved by cutting off the tops, a practice which is likewise adopted independently of this pest requiring it, for the purpose of increasing the yield of beans¹.

The *rose tree*, which produces so many beautiful flowers, is, after a mild spring, greatly injured by a species of aphis (*a. rosæ*). The best mode of remedying this evil, is to lop off the infected shoots before the insects are greatly multiplied, repeating the same operation before the eggs are deposited. By the first pruning a very numerous present increase will be prevented, and, by the second, the following year's

¹ Dr. Skrimshire's Essays on Natural History, vol. i, p. 149.

supply may, in a great measure, be cut off. If it were not for the numerous *enemies* to which the aphid is exposed, their wonderful fecundity is such that the leaves, branches, and stems of every plant would be totally covered with them. Myriads of insects, of different classes, of different genera, and of different species, seem to be produced for no other purpose than to devour the pucerons. On every leaf inhabited by them, we find *worms* of different kinds. These worms feed not upon the leaves, but upon the pucerons, whom they devour with an almost incredible rapacity. Some of these worms are transformed into insects with two wings, others into flies with four wings, and others into beetles. While in the worm state, one of these gluttonous insects will suck out the vitals of twenty pucerons in a quarter of an hour. Reaumur supplied a single worm with more than a hundred pucerons, every one of which it devoured in less than three hours.

Of the *coccus* or cochineal tribe there are two species, which are very destructive in our gardens, the *c. persicæ*, or peach-coccus, and the *c. mali*, or apple-coccus. If we cannot eradicate the peach-coccus, we may, perhaps, reduce its numbers by carefully brushing the twigs of the peach tree, early in the spring, with a hair brush, in the direction of the buds, as many of the insects might thus be detached. Where the insects are very numerous, and where, of course, they are placed very close together at the points of the twigs, these points might be cut off, and carried out of the garden. If exceedingly numerous, all the young twigs might be cut out. In this case, it is true, the fruit will, in a great measure, be lost for that season: but the tree will be thrown into such health, as to be in the finest possible order for the ensuing year. After all this has been done, however, the tree ought still to be examined about the beginning of May, next season; by which time the female coccus, having attained its greatest size,

will become easily perceptible, when each of them should be carefully removed by means of a blunt knife, having a very thin blade, and carefully deposited in a vessel, for the purpose of being carried out of the garden. With each female which is taken at this period, it is supposed that at least 3000 eggs are also destroyed.

The *apple-coccus* lives upon the apple tree, and, like most of the insects of this kind, throws out such a quantity of cotton-like matter, as sometimes to cover every twig of the young trees, as if they had been rolled up in cotton. The history of this insect is, at present, involved in much obscurity; but let us hope that a more attentive examination of its manners and habits will, at no distant period, enable us to guard against its extensive depredations.

ORDER III.—*LEPIDOPTERA*.

The insects of this order are particularly distinguished by their scaly wings, from which alone they derive their name of *Lepidoptera*. These wings are four in number, and are generally variegated by the most brilliant colours, entirely produced by an infinity of little oval *scales*, either of a conical or triangular shape, and placed one above another, like the tiles on the roof of a house. These scales, which may be called the feathers of the butterfly, are fixed on a kind of pedicle, but come off on the fingers, like a farinaceous powder, with the slightest touch, leaving the bare wing, a thin, transparent, elastic membrane, devoid of beauty, and studded with longitudinal rays, showing the places to which the scales were formerly attached. The mouth in these insects is a sort of trunk, which is not unaptly called a spiral tongue, since when not in action it is completely rolled up and placed between two palpi, or downy feelers, which hide it entirely. This trunk, which differs in length, and is sometimes very short, is composed of

two pieces, or laminæ, convex on one side, and concave on the other. These laminæ are easily separated at the will of the insect, and, when re-united, form a hollow cylinder. The insects belonging to the order *Lepidoptera* are so elegant in their appearances, and perfect in their shape, that they claim the highest rank among the numerous and extensive class to which they belong. Such is their variegated beauty, and such the softness of their blended tints, that we might almost fancy them ethereal beings, who, in their passage through infinite space, had stained their wings in the colours of the rainbow.

The *Lepidoptera* are perfectly harmless, and have no organ with which they can either injure others or defend themselves. Their aerial state is comparatively transient: it is during that short but gay period of perfection and enjoyment, when they may be seen in pairs, fluttering from flower to flower, and, with their long-extended tongue, searching each nectary, and extracting the sweets from every cup.

Many thousand species of butterflies are known in Europe, and, in England alone, more than *eleven hundred* have been collected by a celebrated entomologist.

The larvæ or young of the different kinds of butterflies and moths, when in that state in which they come from the egg, are called *caterpillars*. These, which are very minute at first, feed generally on the leaves of vegetables, and increase in size. They cast their skins occasionally, and sometimes change in colour and markings, but never in their general appearance or in their habits. Eating seems to be their sole employment; and when they meet with food that suits their palate, they are extremely voracious, committing great havock in our gardens. But the same infinite Wisdom which restrains the depredations of the aphides and other insects, has also set

bounds to the destruction occasioned by the caterpillar, who has myriads of *internal* as well as *external enemies*. Many flies deposit their eggs in the bodies of caterpillars. From these eggs proceed small maggots, which gradually devour the vitals of the animal in which they reside. When about to be transformed into chrysalids, they pierce the skin of the caterpillar, spin their pods, and remain on the empty skin till they assume the form of flies, and escape into the air to perform the same cruel office to another unfortunate reptile. Every person must recollect to have seen the colewort or cabbage caterpillar stuck upon old walls, or the windows of country cottages, totally covered with these chrysalids, which have the form of small maggots, and are of a fine yellow colour. One of the most formidable enemies of the caterpillar is a *black worm*, with six crustaceous legs: it is as long and thicker than an ordinary sized caterpillar. In the fore part of the head it has two curved pincers, with which it quickly pierces the belly of a caterpillar, and never quits the prey till it is entirely devoured. The largest caterpillar is not sufficient to nourish this worm for a single day; for it daily kills and eats several of them. These gluttonous worms, when gorged with food, become inactive, and almost motionless. When in this satiated condition, young worms of the same species attack and devour them. Of all the trees, the *oak*, perhaps, nourishes the greatest number of different caterpillars, as well as of different insects. Among others, the oak is inhabited by a large and *beautiful beetle*. This beetle frequents the oak, probably because that tree is inhabited by the greatest number of caterpillars. It marches from branch to branch, and, when disposed for food, attacks and devours the first caterpillar that comes in its way.

When full grown, the caterpillars seek some retreat, to prepare for an important change, viz. from the soft caterpillar, possessing motion and feeding

so voraciously, to the hard chrysalis, fixed immovably, and sustained without food. The retreat that is chosen, and the preparation that is made for this important change, vary essentially in different species; some retire to the sheltered situations of houses, walls, and other buildings; some bury themselves in the ground; some wrap themselves up in leaves; others attach themselves to the stalks of plants; while others again eat into the stems of vegetables, or the very heart of trees, and there undergo their metamorphosis. Although each kind of caterpillar seeks a different retreat, yet all of the same species seek the same, and adopt the same means of preservation. Were we disposed in this place to enter into minutiae, we should discover innumerable proofs of design, wisdom, and beneficence in the selection that each species instinctively makes for the place of its abode. Such as are to lie dormant all winter, seek the warmth of our houses, or dig their way into the ground, below the influence of the expected frosts. Such as are to leave their prisons in a few weeks, and before the end of summer, roll themselves up in the leaves of those plants on which they feed. No caterpillar that is to remain in the state of a chrysalis till the following summer, attaches itself to an annual plant; and none that is to enter on its winged state in winter (which some few do) is ever found but upon evergreens. How exact their knowledge, and yet how independent of experience or tradition! for this office is never performed a second time by the same individual, and no caterpillar ever saw its parents, to derive its information thence.

In the preparation, as we have termed it, which is made for their metamorphosis, caterpillars differ as much as in their selection of a proper place. Some attach themselves by a thread from their tails, and are suspended perpendicularly; while others, among which is the white cabbage butterfly, by another

thread across the body, are suspended horizontally. The silk-worm and several others spin a complete covering or case for their bodies, some of finer materials and less agglutinated together than others. Some caterpillars form a ball or nest of the mould in which they are buried, glued together by their saliva, and smoothed within; and others fasten two leaves together, or, curling its edges, unite two parts of the same leaf by threads and bands, and thus form a covering and safe retreat for themselves. After the animal has lain dormant its due time in the chrysalis state, the skin or shell bursts, and the perfect insect, in its winged state, creeps out, gradually expands its wings, and, when they are dried, becomes a gay inhabitant of the air. It now no longer seeks to satisfy its hunger on the gross food that it devoured when a caterpillar, but sips the nectar from the blossoms of the flowers¹. Having fulfilled the intentions of nature, they deposit their eggs with care, and, having thus provided for a future generation, the insect terminates its short but brilliant career. In the deposition of their eggs, the parent butterflies and moths display wonderful instinct in selecting precisely such places as are best adapted to their future young; such plants, for instance, as will furnish food for the new-born caterpillars, and such parts of plants as are not likely to be removed by decay, or such as will be exactly in the required stage of maturity at the time when the caterpillars are to be born. Thus, a little insect (*tinea pomona*) lays its eggs in the blossom, that its caterpillar may feed on the fruit of the apple; and several others act in the same provident way.

The papilionaceous insects, in general, soon after their enlargement from the chrysalis, and commonly during their first flight, discharge some drops of a red-coloured fluid, more or less intense in different spe-

¹ Dr. Skrimshire's Essays on Natural History, vol. ii, p. 2.

cies. This circumstance is peculiarly worthy of attention, from the explanation which it affords of what has been sometimes considered, both in ancient and modern times, in the light of a *prodigy*, viz. the descent of red drops from the air, which has been called a *shower of blood*; an event recorded by several writers, and particularly by Ovid, among the prodigies which took place after the death of the great dictator.

With threatening signs the low'ring skies were filled,
And sanguine drops from murky clouds distilled.

The purple emperor (*papilio iris*) is the most beautiful and most interesting of our British butterflies. In his manners, as well as in the varying lustre of his purple plumes, says Mr. Haworth, he possesses the strongest claims to our attention.

It is in the month of July that he makes his appearance in the winged state, and he invariably fixes his throne upon the summit of some lofty oak, from the utmost sprigs of which, in sunny days, he performs his aerial excursions. 'In these,' continues this writer, 'he ascends to a much greater elevation than any insect I have ever seen, sometimes mounting even higher than the eye can follow; especially if he happen to quarrel with *another emperor*, the monarch of some neighbouring oak. These insects never meet without a battle, flying upward all the while, and combating furiously with each other; after which they frequently return to the identical sprigs from which they each ascended. The purple emperor commences his aerial movements from ten till twelve o'clock in the morning, but does not perform his loftiest flights till noon; decreasing them after this hour until he ceases to fly, about four in the afternoon.'

The peacock butterfly (*p. Io*), whose wings are of a brownish red colour, with black spots, is sufficiently common in the south of England, but extremely rare in the north. The tortoise-shell butterfly

(*M. urticae*), which appears in its winged state about the month of April, is one of the most common, and at the same time the most beautiful of the British lepidoptera: the upper wings are red, and marked with alternate bands of black and pale orange.

The mazarine blue butterfly (*p. cymon*) forms fig. 3 in our Frontispiece.

The *sphinxes*, sometimes called by the title of hawk-moths, are chiefly seen in the evening. The name sphynx is applied to the genus on account of the posture assumed by the larvæ of several of the larger species, which are often seen in an attitude much resembling that of the Egyptian Sphinx,—with the fore-parts elevated, and the rest of the body applied flat to the surface. One of the most elegant insects of this genus is the privet-hawk-moth (*sphinx ligustri*), measuring nearly four inches and a half, from wing's end to wing's end: the upper wings are of a brown colour, most elegantly varied or shaded with deeper and lighter streaks and patches; the under wings and body are of a fine rose colour, barred with transverse black stripes. The caterpillar, which is very large, is smooth, and of a fine green, with seven oblique purple and white stripes along each side: at the extremity of the body, or top of the last joint, is a horn or process pointing backwards. This beautiful caterpillar is often found in the months of July and August feeding on the privet, the lilac, the poplar, and some other trees, and generally changes to a chrysalis in August or September, retiring for that purpose to a considerable depth beneath the surface of the ground, and, after casting its skin, continuing during the whole winter in a dormant state, the sphinx emerging from it in the succeeding June.

Another, perhaps, still more beautiful insect is the *sphinx ocellata*, or eyed hawk-moth, which is principally found on the willow-tree, in its perfect state, in the month of June: the upper wings, and body are

brown, the former finely clouded with different shades, while the lower wings are of a bright rose-colour, each marked with a black spot.

The largest and most remarkable of the British hawk-moths is the *sphinx atropos* or death's-head hawk-moth. The upper wings are of a fine dark grey colour, with a few slight variegations of dull orange and white: the under wings are of a bright orange-colour, marked by a pair of transverse black bands: the body is also orange-coloured, with the sides marked by black bars: on the top of the thorax is a very large patch of a most singular appearance; exactly resembling the usual figure of a skull, or *death's head*, and is of a pale grey, varied with dull ochre colour and black. When in the least disturbed or irritated, this insect emits a stridulous sound, something like the squeaking of a bat or a mouse; and from this circumstance, as well as from the mark abovementioned, is held in much dread by the vulgar in several parts of Europe, its appearance being regarded as a kind of ill omen, or harbinger of approaching fate. The *caterpillar* from which this curious sphinx proceeds, principally found on the potatoe and the jessamine, is, in the highest degree, beautiful, measuring sometimes five inches in length: its colour is a bright yellow, and its sides are marked by stripes of a mixed violet and sky-blue colour. It usually changes into a chrysalis in the month of September, and emerges the complete insect in June or July following: some individuals, however, change in July or August, and produce the moth in November. The sphinx atropos is generally considered a very rare insect, and as the caterpillar feeds chiefly by night, concealing itself, during the day, under leaves, &c., it is not often detected. Yet in some years (particularly in the autumn of 1804) it was found in so great abundance in some countries, as to be very prejudicial to the potatoe-plants.

The alteration of form which the whole of the

papilionaceous tribe undergo, and, in a particular manner, the changes just described, of the genus sphinx, afford a subject of the most pleasing contemplation to the mind of the naturalist: and though a deeply philosophical survey demonstrates that there is no real or absolute change produced in the identity of the creature itself, or that it is in reality no other than the gradual and progressive evolution of parts before concealed, and which lay masqued under the form of an insect of a widely different appearance, yet it is justly viewed with the highest admiration, and even generally acknowledged as, in the most lively manner, typical of the last eventful change. If any regard is to be paid to a similarity of names, it should seem that the ancients were sufficiently struck with the transformations of the butterfly, and its revival from a seeming temporary death, as to have considered it as an emblem of the soul; the Greek word $\psi\upsilon\chi\eta$ signifying both the soul and a butterfly. This is also confirmed by their allegorical sculptures, in which the butterfly occurs as an emblem of immortality.

Modern naturalists, impressed with the same idea, and laudably solicitous to apply it as an illustration of the awful mystery revealed in the sacred writings, have drawn their allusions to it from the dormant condition of the papilionaceous insects during their state of chrysalis, and their resuscitation from it; but they have, in general, unfortunately chosen a species the least proper for the purpose, viz. the *silk-worm*, an animal which neither undergoes its changes under the surface of the earth, nor, when emerged from its tomb, is it an insect of any remarkable beauty; but the larva or caterpillar of the *sphinx*, when satiated with the food allotted to it, during that state, retires to a very considerable depth beneath the surface of the ground, where it divests itself of all appearance of its former state, and continues buried during several months; then rises to

the surface, and bursting from the confinement of its tomb, commences a being of powers, so comparatively exalted, and of beauty so superior, as not to be beheld without the highest admiration. Even the animated illustration taken from the vegetable world, so justly praised, as best calculated for general apprehension, must yield in the force of its similitude to that drawn from the insect's life, since Nature exhibits few phenomena that can equal so wonderful a transformation.

The helpless, crawling caterpillar trace
From the first period of his reptile race,
Clothed in dishonour, on the leafy spray
Unseen he wears his silent hours away ;
Till satiate grown of all that life supplies,
Self-taught the voluntary martyr dies.
Deep underneath his darkling course he bends,
And to the tomb, a willing guest, descends.
There, long secluded in his lonely cell,
Forgets the sun, and bids the world farewell ;
O'er the wide waste the wintry tempests reign,
And driving snows usurp the frozen plain.
In vain the tempest beats, the whirlwind blows ;
No storm can violate his grave's repose.
But when revolving months have worn their way,
When smile the woods, and when the zephyrs play,
When laughs the vivid world in summer's bloom,
He bursts and flies triumphant from the tomb ;
And while his new-born beauties he displays,
With conscious joy his altered form surveys.
Mark, while he moves amid the sunny beam,
O'er his soft wings the varying lustre gleam.
Launched into air, on purple plumes he soars,
Gay Nature's face with wanton glance explores ;
Proud of his various beauties wings his way,
And spoils the fairest flow'rs, himself more fair than they !
And deems *weak man* the future promise vain,
When *worms* can die, and glorious rise again ?

DR. SHAW.*

Among the moths (*phalænæ*), the most remarkable of the British species are the clothes-moth, the *sera-tella* and the brown-tail moth.

* See Dr. Shaw's *Zoology, Insecta*, vol. i, p. 216.

The history of the clothes-moth (*phalena or tinea sarcitella*) is extremely curious. The eggs are deposited by the parent moth on such substances as will furnish food for the yet unborn progeny; viz. woollen cloths, furs, &c. and on those in particular which lie neglected, and in dark undisturbed places. The young caterpillar no sooner quits the egg, than it begins to form its covering. It first spins a fine coating of silk around its body, and then attaches to it small pieces of the wool or fur, which it has cut off by means of its scissar-like teeth; these are fastened together by other threads of its own spinning, until it has formed a cylindrical covering, in which it ever after lives. It is open at both ends, and large enough in the middle to allow of its turning, so that it can put out its head for food at either extremity of the case. It lives entirely on the substance where it was born; and when it shifts its place, with its head and fore feet protruded, it drags its covering after it. When the caterpillar is somewhat increased in bulk, and finds its case too small, it sets about enlarging it with admirable skill. To lengthen it, the little workman begins by adding first to the silken lining, and then covering it with wool, as he had done in making it; and this he always does at both extremities. To widen it, he slits the case lengthways from the centre to one extremity, and fills it up with a new layer; he then does the same on the other side of the case; and proceeds, lastly, to the same process from the centre to the other extremity. All this may be beautifully elucidated by removing one of these insects to cloths of different colours, at the time when he is enlarging his case. The insect changes to a chrysalis in this covering, and the moth appears in August. It is small, and of a lead or dirty white colour, spotted with black. The most certain means of destroying this very noxious insect is, to expose the goods to the fumes or vapour of oil of turpentine, or to brush them with a brush dipt into

the oil. Tobacco fumes will destroy them, but not so certainly. September and October are the seasons for taking these means to destroy them, as the larvæ are then young, and many of them not cased.

The *ceratella* moth in its caterpillar state, very like that we have just described, is often found on pear-trees in great numbers. The best method of removing this moth is to watch the time of its appearance, and, as it rests among the leaves by day, to wash the trees well with a garden engine.

The brown-tail moth (*phalæna* or *bombyx phæor-rhæus*), so common in England, as to be found every year in considerable abundance, made its appearance in such *great force* in the years 1780, 1781, and 1782, that eighty bushels of them were collected in one day, in the parish of Clapham, for the purpose of being burnt. They were chiefly found on the hawthorn, oak, elm, blackthorn, rose-trees, brambles, and fruit trees.

It is curious to observe the eddies which small insects, and indeed all of the *moth* kind, describe around a light in the evening, and almost impossible to guess what attracts them so powerfully to their own ruin. A modern author says,

Why flutter so? why, foolish, run to death
Inevitable, in the perfid blaze
Of yonder watchful lamp? Does love prompt thee
Under these lofty walls to rove, and seek,
Through evening shades, thy carbuncle-eyed mate,
As learned sages tell? or, by the light
Suddenly dazzled, hast thou lost thy way
To groves and meadows, where to lead, unseen,
A safer life? or does thy little mind,
With greater projects swoll'n, dare to explore
This burning *Ætna's* mysteries? So did
Empedocles, and in the flames expired.

ORDER IV.—NEUROPTERA;

Or nerve-winged insects, have four naked membranaceous wings, but no stings; and they differ from the last order, as their wings are without the minute

scales or down. The *dragon-flies*, *ephemeræ* or *day-flies*, and the *phryganeæ*, belong to this order.

The *Ephemeræ* or day-flies differ in many respects from all other insects. Their larvæ live in water (where earth and clay seem to be their only nourishment) for *three years*, the time they consume in preparing for their change, which is performed in a few moments. The larvæ, when ready to quit that state, rises to the surface of the water, and, getting instantaneously rid of its skin, becomes a chrysalis. This *chrysalis* is furnished with wings, which it makes use of to fly to the nearest tree or wall; and there settling, it in the same moment quits a second skin, and becomes a perfect *Ephemeræ*. In this state all the species live but a very short time, some of them scarcely *half an hour*, having no other business to perform than that of continuing the race. They are called the insects of a day; but very few of them ever see the light of the sun, being produced after sunset, during the short nights of summer, and dying long before the dawn. All their enjoyments, therefore, seem confined entirely to their larva state.

For an account of the *dragon-fly* and the *phryganeæ* or spring-fly, see T.T. for 1820, *Introduction*, pp. xxxix-xli.

The slender-bodied dragon fly (*libellula virgo*), fig. 4, in our *Frontispiece*, is very common in stagnant waters and rivulets.

ORDER V.—HYMENOPTERA,

Or four-winged insects, with stings; including the *gall-insects*, *ichneumon*, *hornet*, *wasp*, *bee*, *ant*, &c.

The greater part of the species of *gall-insects* (*cynips*) are produced from eggs deposited by the parent insects in the tender branches, or upon the leaves, of trees, in the spring of the year; others live concealed among the leaves, and some are bred in the bodies of other insects. The *gall-insects*,

which deposit their eggs in the branches or leaves of trees, place them in a small hollow which they form by means of an instrument at the posterior part of their body. Each egg is fixed to the spot by a kind of gluey matter with which it is covered. The juices of the leaf or stem overflow by the small vessels which are opened in this operation, and thus form a gall or excrescence, in which the egg becomes inclosed. When the larva is hatched, it finds around it the food that is necessary for its subsistence. It gnaws and lives upon the substance of the gall, which increases in bulk and consistence, in proportion as its interior is thus destroyed. Some of these galls have, in their interior, either only one cavity in which many larvæ are inclosed together, or many small cavities, having a communication with each other; some have many separate cavities; and others have only one cavity, which is occupied by a solitary insect. When the larvæ have attained their full growth, some of the species eat their way out, and drop upon the earth, in which they bury themselves, and there undergo their metamorphoses; and others are transformed within the galls, and leave them only as perfect insects. The species of ground ivy and the oak have each a peculiar gall-insect, *c. glechomatis*, and *c. quercus folii*, the latter appearing not unlike a rose-bud when beginning to blow¹.

Some of the species of the genus *tentredo* or saw fly, by means of a *saw* which they possess, deposit their eggs in the buds of flowers, while others insert them into the twigs of trees or shrubs. The gooseberry tree saw-fly (*t. grossularis*) makes great havoc among its favourite plants; but its sluggish nature rendering it an easy prey to birds, its devastations are materially diminished.

The rose-tree has also its *tentredo*: the female may be seen in a fine summer morning, about ten o'clock, rushing with eagerness over all the branches

¹The excrescence vulgarly denominated *oak-apple*, is the work of an insect of the genus *cynips*.

of the rose, and generally selecting that which is near the extremity of the principal stem. Here she makes an opening with her borer, and, when she considers the hole of a proper size, deposits an egg in the cavity. She then remains perfectly quiet for some minutes, with the borer still in the hole; after this pause she partly withdraws the instrument, and in the act emits a frothy liquor which fills the cavity. The use of this liquor is not well understood, but, as soon as it is emitted, the insect wholly withdraws her borer, to repeat the operation in another place. Of these holes, she will make from four to twenty by the side of each other. That part of the rose-branch where the deposition has been effected begins to turn brown on the following day, and the wounds it has received begin to rise and increase in convexity from day to day, till in due time the inclosed egg gives birth to a larva, which bursts its green covering to seek its food on the surface of the rose-leaf. The larvæ of the tenthredines bear a strong resemblance to caterpillars, but have a greater number of feet. They inhabit different trees according to their species; and some of them exhibit in their economy peculiarities deserving of notice¹.

Instinct leads the different species of the *ichneumon* to provide for their future progeny in a manner distinct from each other. Some lay their eggs in the crevices of walls; others insert their long borers into the clefts of trees, and there deposit their burthen; while a third division, and that the most singular in the adoption of its object, singles out an unlucky *caterpillar*, and the female *ichneumon*, plunging her long tube into its body, introduces egg after egg, and, notwithstanding all the attempts of her victim to rid itself of its tormentor, continues her operation till her whole stock of eggs is deposited. The numerous larvæ, which originate in the body of the caterpillar from the eggs thus laid, and which

¹ Wood's Linnæan Genera of Insects, vol. ii, pp. 43, 46.

live at its expense, and feed on its substance, do not, as one might reasonably suppose, destroy the animal directly, but, carefully avoiding the immediate destruction of that, which would at the same time be death to themselves, they leave the vital parts and principal viscera untouched, feeding only on that fatty substance with which the body of the caterpillar is plentifully provided. This substance furnishes nourishment enough for the larvæ to exist till they have attained their full size; and when they are ready for their usual transformation they pierce the skin of the caterpillar with their teeth, and, creeping out in various places, spin themselves a silken covering, in which they pass the chrysalis state. In the mean time the languid and shrivelled caterpillar, with its body like a sieve, after having yielded all its substance to its parasitical companions, is in a short time relieved from its sufferings by death.—The insects of this genus are, for the most part, remarkable for the continued vibration of their antennæ.

What has been said of the ichneumon will apply, for the most part, to the *chrysis*; their habits and metamorphosis being much the same. The chryses are, however, far more beautiful insects, and are in general distinguished by the most brilliant metallic colours. They are generally seen in the hottest part of a summer day flying about walls, or near decayed wood, in the crevices of which the female deposits her eggs. Their movements are lively, and their flight rapid. The *golden chrysis* (*c. ignita*) is represented in fig. 5 of our *Frontispiece*.

Of the manners of the sand-wasp (*sphex sabulosa*), common in some counties of England, but rarely seen near the metropolis, Mr. Ray furnishes the following curious anecdote. ‘I observed one of them,’ says he, ‘dragging a green caterpillar thrice its own size. It laid this down near the mouth of a burrow that it had made in the ground: then, removing a little ball of earth with which it had co-

vered the orifice, it first went down itself, and, after staying a short time, returned, and, seizing the caterpillar again, drew it down also. Leaving the caterpillar there, it came up again, and, taking some little globules of earth, rolled them one by one into the burrow, scraping the dust in at intervals with its fore-feet, in the manner of a dog; thus alternately rolling in pieces of earth, and scraping in dust, till the hole was full; sometimes going down (as it seemed) in order to press down the earth; and once or twice flying to a fir-tree which grew near, perhaps for the purpose of getting turpentine to glue it down, and make it firm. The hole being filled, and equalled with the superficies of the earth, that its entrance might not be discovered, it took two fir-leaves that were near, and laid them by the mouth, most probably to mark the place.'

Of the wasp (*vespa*), Mr. Wood furnishes us with a succinct but pleasing description. Wasps build their upright oval nests of bits of wood and glue. The males are employed to collect the wood from the frames of windows, and from old posts and rails. They use their strong jaws to cut the wood, and carry away the saw-dust with their feet, making it into a mass at the nest, with a glutinous liquor which falls from their mouth. The nest is twelve inches or more in diameter, and is formed of several horizontal stages of hexagonal cells. The substance of the nest, after being kneaded and worked by the industrious inhabitants, is very like coarse whitish-brown paper. In each cell the female deposits an egg, which is hatched into a larvæ or maggot. These larvæ are fed by the labouring wasps with a kind of honey, but very inferior to that of the common bee. The mothers attend to them with the greatest assiduity, and it is interesting to observe with what activity they visit the cells one after another, feeding each larva as they go along. When the larvæ are become large enough to fill their respective cells

they close up the mouth by spinning a very fine silken web, pass into the chrysalis state, and, after a certain period, emerge in their perfect form. The males have no sting, and are not numerous; the females are but very few, but the neutral or labouring wasps abound, and compose nearly the whole of every swarm. They lay up no store of honey for the winter, and most of them perish in the cold season. The few that survive lay the foundation of a new colony in the spring, which, by the month of July, is raised to a full and healthy swarm'. The remedies recommended at p. lvi, in the case of the *bee*, will be found equally efficacious in alleviating the pain occasioned by the *sting of the wasp* and the *hornet*. This last insect (*v. crabro*) is considerably larger than the common wasp, but, on a slight inspection, very similar in appearance and colour: it makes its nest in the trunks of hollow trees, and is not found in Scotland, though common enough south of the Tweed. Its sting is extremely painful.

Of the habits and economy of the bee (*apis*) we have, at various times, in our previous volumes, given many pleasing illustrations. The *practical management* of this insect, a subject which has been, till of late, but ill-understood, and yet of the last importance to those who reside in the country, and who, either from motives of amusement or of *profit*, wish to understand thoroughly the best method of keeping an *apiary*; such persons we beg to refer to the *second edition* of Mr. JENNINGS'S FAMILY CYCLOPEDIA, article *BEE*, which we regret we have not space to transfer to our pages. This really *useful* work is not only a *complete Code of Family Information*, but is fertile of curious and original matter on subjects of *Natural History*².

¹ See Time's Telescope for 1820, Introduction, pp. xlii, xliii.

² Consult also 'Huber on Bees,' translated by Dr. J. R. Johnson, 12mo, 1808.—And here we must not omit to name, for the advantage

Remedy for the Sting of the Bee.—The stings of bees are more virulent than even those of wasps, and are sometimes attended with violent effects. As the sting is barbed, it is generally left in the wound.—When a person is stung by a bee, the sting should be instantly extracted. The wound should be sucked, and afterwards washed with cold water, or still better with salt and water; then apply a liniment, consisting of two parts of olive oil, and one part of volatile alkali (i. e.), spirits of hartshorn, liquor of ammonia, or sal volatile (aromatic spirit of ammonia), whichever may happen to be at hand. At the same time, five, or even ten drops of either of the last mentioned ammoniacal preparations, may be given internally in a little orange-flower water, or other agreeable fluid. Even if the sting has not been extracted, the liniment should be used. An application of *goulard-water*, or a cold saturnine poultice, has been sometimes effectual. A solution of indigo in water is a simple, but said to be an expeditious remedy. Honey and oil have also been used with advantage. *Powdered chalk* mixed with water to the consistence of a paste, and rubbed for a few minutes on the part stung, has not only been found effectual for the cure of the stings of bees, but also those of wasps and gnats.—*Jennings's Family Cyclopædia*, art, BEE-STING.

The instinct and economy of the ant (*formica*) are scarcely less wonderful than those of the bee; to these we have several times alluded in the former volumes of *Time's Telescope*: want of space alone compels us to confine our attention to some few anecdotes of its ingenious and indefatigable labours, the result of some observations by an eminent naturalist. Every ant's nest has a straight hole leading

of our young friends, a pretty trifle in the shape of a little *Poem*, entitled the *Monarchy of the Bees*, illustrated by Notes, exhibiting some of the most remarkable circumstances in the history of this wonderful insect.

into it about the depth of half an inch, which afterwards runs sloping downwards to the public magazine, where the grains they collect are stored up: this is a different place from that where they rest and eat. Their corn being kept under ground, will shoot and grow, did they not prevent it by biting out the germen or bud before they lay it up; but this they constantly do; for if their corn be examined, no bud will be found therein, nor if sowed in the earth will it ever vegetate: were it, however, to lie continually in the ground, the moisture would occasion it to swell and rot, and make it unfit for food. But these inconveniences they find means to remedy by their vigilance and labour in the following manner: they gather very small particles of dry earth, which they bring out of their holes every sun-shiny day, and place them in the heat. Every one of them brings in her mouth a particle of this earth, lays it by the hole, and then goes to fetch another; so that in the space of a quarter of an hour a vast quantity of such small particles of dried earth are heaped round the hole. Their corn is laid upon this earth when under ground, and covered with the same: when these particles of earth are brought out, they fetch their corn likewise, and place it round this earth, making two heaps about the hole, one of dry particles of earth and the other of grains of corn; last of all, they fetch out the remainder of their dry earth whereon the corn was laid. They never go about this work unless the weather be clear, and the sun very hot, but when both are favourable they perform it almost every day.

The author of this account had found a nest of ants in a box of earth, standing out from a window two stories high; whence they made excursions both upward to the top of the house, where some corn lay in a garret, and downward into a garden which the window overlooked. The situation of this nest obliged them to go up or down a great way before

they could possibly meet with any thing; but he found, notwithstanding, that none of them ever returned empty, but every one brought a grain of wheat, rye, or oats, a small seed, or even a particle of dry earth, if nothing else could be got. Some travelled to the farther end of the garden, and with prodigious labour brought heavy loads from thence. It required four hours, as he learned by frequent observation, to carry a pretty large grain or seed from the middle of the garden to the nest, and he computed therefrom that an ant works as hard as a man who shall carry a heavy load twelve miles a-day.

The pains these ants took to carry grains of corn up a wall to the second story, climbing all the way with their heads downwards, must be exceedingly great. Their weariness was shown by their frequent stops at the most convenient places; and some appeared so fatigued and spent, that they could not reach their journey's end; in which case it was common to see the strongest ants, which had carried home their load, come down again and help them.— Sometimes they were so unfortunate as to fall down with their burthen when just in sight of home: when this happened they seldom lost their corn, but carried it up again.

He saw one, he says, of the smallest ants carrying a large grain of wheat with incredible pains: when she came to the box where the nest was, she and her load together tumbled back to the ground. Going down to look for her, he found she had recovered the grain, and was ready to climb up again. The same misfortune befel her three times, but she never let go her hold, nor was discouraged; till at last her strength failing, she was forced to stop, and another ant assisted her to carry home her load to the public stock.

How wonderful is the sagacity of these insects! how commendable their care, diligence, and labour! how generous their assistance of each other for the

service of the community! how noble their public virtue, which is never neglected for the sake of private interest! In all these things they deserve our notice and imitation.—For an account of the extraordinary *Architecture of the Ant*, as well as for many other interesting particulars of this insect, we refer to *Huber on Ants*, translated by Dr. J. R. Johnson, 12mo, 1820.

ORDER VI.—DIPTERA.

These are two-winged insects having two poisers or balancers instead of under wings. *Gad-flies*, *gnats*, and *flies* in general, belong to this order.

These insects being furnished with a kind of gimblet, are enabled to pierce through the tough hide of horned cattle, and to deposit their eggs in the backs of the animal; some species also lay their eggs in the nostrils of sheep, while others deposit them in places from which the larvæ as soon as hatched can be conveyed into the intestines of horses¹.

The crane-flies (*tipulæ*) are common in our pastures from the commencement of spring until the beginning of autumn: they have a great resemblance to gnats, but differ from them by their expanded wings and the want of a long proboscis. The meadow crane-fly or long legs (*t. oleracea*), although very destructive to the roots and tender shoots of plants, is devoured in great numbers by rooks, jackdaws, starlings, lapwings, and other birds. The yellow-striped tipula forms fig. 6 in our *Frontispiece*.

The wheat-fly (*t. tritici*), twelve of which have been observed at one time laying their eggs in a single ear of wheat, would soon become of serious

¹ For some curious information on this subject, consult Mr. Bracy Clark's *Treatise on the Bots of Horses and other Animals*, 4to, 1815.

injury to mankind, were not their race kept within due bounds by several natural enemies, particularly the ichneumon tipulæ.

The well-known Gaffer Long-legs, so frequently seen in houses in the autumnal evenings, flying about the flame of the candles, and often perishing in the blaze, is the *t. rivosæ*, one of the larger species of this genus.

The tribe of *flies* (*muscæ*) presents many curious species. The common flesh-fly (*m. vomitoria*) is a viviparous insect, depositing its young, in a living state, on the meat in our shambles and larders. The rapid multiplication of the fly is thus calculated by Leeuwenhoek. 'Let us suppose that in the beginning of June there shall be two flies, a male and a female, and the female shall lay 144 eggs, which eggs in the beginning of July shall be changed into flies, one half males and the other half females, each of which females shall lay the like number of eggs; the number of flies will amount to 10,000: and supposing the generation of them to proceed in like manner another month, their number will then be more than 700,000, all produced from one couple of flies in the space of three months.' The Hessian fly (*m. pupilionis*) is very destructive to wheat and rye, and has occasionally been a source of great alarm to our agriculturists. The cheese-fly (*m. putris*), well known to housewives under the name of *hopper*, deposits its eggs in the crevices or holes of the cheese, whence those numerous *maggots* that so much amuse us by their agility and surprising leaps. One of these insects, not a quarter of an inch in length, has been known to leap out of a box six inches deep.

The *tabanus* tribe produces some insects which are extremely troublesome to animals; they also occasionally annoy their lord and master by sticking to and stinging his legs. The gnat (*culex*) we have

already described: immense multitudes of them, sufficient to darken the air, have, sometimes, been observed in England.

The spider-flies (*hippoboscæ*) inhabit woods and marshy places; the *forest-fly* (*h. equina*); found in abundance in the New Forest in Hampshire, and in several other parts of England, is particularly tormenting to the noble animal after which it is named. So hard and tough are the skins of these determined blood-suckers, that it is almost impossible, by crushing, to kill them; and the only effectual mode of destroying them is by tearing off their heads. Forest flies are occasionally found upon cattle; and in open countries even upon dogs.

ORDER VII.—*APTERA*,

Or insects without wings, in both sexes. This order comprehends all kinds of *spiders*, the *lice* of different animals, and also *lobsters*, *crabs*, *shrimps*, &c., which last are all of the genus *cancer*. The ominous companion of the true death-watch, referred to at p. xxiv, is the *termes pulsatorium*, which belongs to this order, and is of a greyish white colour, much resembling the common louse; it is found in dry wood, or in books not often used. It has an oval body, with long antennæ; runs with great rapidity, and, like its congener, shuns the light. Some entomologists have described it as the *pediculus* of old wood. The writer has, with his companions, frequently witnessed the alarming labours of this puny insect, giving its responses to a noise, imitated by striking leisurely with the nail on a glass half filled with liquid, or placed on a marble slab, to lessen the sharpness of the sound. Sometimes the insect would suddenly stop his ticking, but instantly re-

* See *Time's Telescope* for 1820, *Introduction*, p. xlix; and Mr. Wood's excellent *Illustrations* before noticed, vol. ii, pp. 94-97.

sume his note on mimicking the sound, which it continued for a considerable time. The sound was full as loud, but more regular than the ticking of a watch. It was correctly ascertained to proceed from a picture hanging in the room, whence the sound would continue to be distinctly emitted, if the picture was laid on the table or chair, and disturbed as little as possible in the moving. On a very careful examination, no other insect was discovered but the *termes pulsatorius*, these being very numerous; and the observer was surprised that there was not a chorus of this tinkling music.

The nets spread out by spiders, to catch their unwary prey, are composed of similar materials to the silk of the silkworm, and are spun from the animal's body nearly in the same way. How artfully they are contrived, and how cunningly the spider lurks unseen, but continually watches the approach of its prey, must so often have been the subject of observation and admiration, as to make any description unnecessary.

The common house-spider (*aranea domestica*), fig. 7 in our *Frontispiece*, belongs to a numerous and well-known genus, the terror of many and the antipathy of all. It is a proscribed race, which we think ourselves entitled to destroy whenever we have an opportunity, from feelings of disgust, rather than from the operation of reason. This feeling seems implanted as it were in our nature, from which even the naturalist is not wholly exempt; and it tends, together with other causes, to check the multiplication of an insect which would otherwise become by far too numerous. The eight eyes with which the spider is provided are fixed points, disposed in a different order in different species, inasmuch that authors have taken advantage of the circumstance, to divide the genus into families. They are hard, smooth, and brilliant, and are always placed on the head, i. e. before the two oblique lines which are seen between

the head and the thorax. The inconvenience which might arise from their want of motion is remedied by their number and position, which is well calculated to comprehend every view compatible with the wants or safety of the animal. There is little doubt that the spider can inject a venomous liquor into the wound made with its fangs. Instances, and those related by authors of credit, have occurred, of inflammation succeeding the bite of a spider on the human body.

The female spider lays a number of eggs, of which she takes the greatest care, as well as of the young when they are hatched, exposing herself to every danger when it becomes necessary to defend them. At other times spiders are very fearful, and fly with precipitation whenever they are approached; but if by any chance, while the female is carrying her little ones on her back, one of them should fall off, she would rather perish than abandon it, and will wait with firmness till all danger be passed; after which the young one will remount, and the mother continue her journey. She is devoted to her eggs, which she never abandons. If they are taken from her, she exhibits the greatest degree of inquietude, moving about with rapidity from place to place in search of them: if they are restored, she seizes them with precipitation, and runs off as fast as possible. This fondness of the spiders for their young is the more remarkable, as they are a solitary race, appearing to avoid and hate their fellows, and even devouring each other when they have an opportunity.

The cobwebs of other spiders, called gossamer, are frequently seen floating in the air in a sunny day, and are sometimes so abundant as to fall in showers. Each of these may be compared to a balloon, trans-

* See Mr. Wood's Illustrations of the Linnæan Genera of Insects, vol. II, p. 126; Time's Telescope for 1820, Introduction, p. 115, and the previous volumes.

porting the little aeronaut that formed it, by means of its specific lightness. This species of spider, attaching its first formed thread to the leaf or branch of a tree, by dropping to a certain distance, lengthens it; then running up the thread, and dropping again, draws out another, and so on, till a sufficient quantity of this silk is formed to buoy up the spider in the air. He then separates the whole from the leaf, and, running down to his seat at the bottom, trusts himself and his balloon to the mercy of the wind. It is thus that these animals are transported from tree to tree, and from wood to wood, in search of food. The cobwebs that are spread over the surface of the grass, and that offer so beautiful an object to the eye early in a summer's morning, through the brilliancy of the dew-drops formed and suspended on their silken threads, and the reflection of the sun's rays from each of these crystal gems, are the work of another species of spiders.

All *lice* live by suction; some on the blood of man, others on that of quadrupeds and birds. The microscope shows the instrument by which this purpose is effected. It is a *proboscis*, generally concealed in its sheath, very sharp, and provided, towards one end, with some reversed prickles. These insects are oviparous, and multiply amazingly. The young soon issue from the eggs (or nits as they are called), and, after having changed the skin two or three times, are ready to produce in their turn. Experience has shown that, in six days, a louse will produce fifty eggs. The young leave the shell about the same period of time, and in about eighteen days more are in a state for reproduction. From these observations, and the calculations arising from them, it appears that two females may have 18,000 little ones in the space of two months.

Hottentots and monkeys seem to delight in the filthy custom of eating these insects, and there is reason to believe that the same nauseous inclination

prevails among the lower class of the Russians. Most of the quadrupeds and birds seem to have their peculiar species of this disgusting genus, and even fish and insects are not totally exempt from them.

The flea (*pulex*) has more strength and agility in proportion to its size than any other animal. A flea, by a dexterous contrivance, has been fastened to a small cannon, which it has dragged along without difficulty; and it is not uncommon to find it exhibited at country fairs, either drawing a chain fixed to its scaly body, at least thirty times heavier than itself, or springing along with a little ivory chariot behind it.—See *TIME'S TELESCOPE* for 1820, *Introduction*, p. ii.

The cheese-mite (*acarus siro*), which belongs to the tribe of ticks, appears to the naked eye little more than a moving particle of dust; but, on the application of the microscope, is found to be a perfect insect, performing all its regular functions. The minute scarlet insect, so troublesome to haymakers and reapers, called commonly *harvest bug*, is of the same family, and is not very unlike a spider. It burrows into the skin, and raises a considerable tumour, which itches much, and is often painful. See p. 247.

Having described the principal British species of the genus *cancer* in our previous volumes, we shall merely observe, that their shells afford a material constituent in the formation of chalk-beds and beds of marl, which are formed at the bottom of the sea. We frequently meet with specimens of entire shells in chalk-pits, which are now inland; and there is little doubt that, in a comminuted state, they form a principal ingredient in most calcareous earth.

The genus *monoculus* presents a singular species, in the water-flea (*m. pulex*), which is familiar even to the unscientific observer. When submitted to the microscope, the body of this flea appears to be inclosed in a bivalve sheath, from the opening of which

proceeds its forked leg. The horns are branched in a peculiar manner, and the insect can move them in all directions, so as to contribute materially, by their action, to that jerking motion in the water, whence this species of *monoculus* has derived its trivial name. In the body of the female the bunch of eggs is very plainly seen through the transparent shelly covering. The eyes are formed of little black globules, situated very near to each other, and invested with a common membrane, which gives them the appearance of unity.

The *onisci*, or wood-lice, are of very retired habits. They but seldom appear in the day-time, seeming to shun both the light and heat of the sun. They are mostly found under stones, in the crevices of walls, in cellars, and in subterraneous places. When undisturbed they move slowly, and their many legs seem but of little comparative use to them even in flight. The majority of the species are either so sensible, or so timid, that they roll themselves up as soon as they are touched; and, like the hedge-hog, present a ball without the slightest appearance of head or feet. In this state they remain till they think the danger past, when they gradually unfold, and slowly walk away. The *onisci* feed on different substances; on leaves, on plants, and on fallen fruit. Most of them live on the earth, but some inhabit the water. Of these, the *o. aquaticus* is sometimes seen, like a small shrimp, swimming in our cisterns; while the marine species, the *o. entomon*, of comparatively gigantic size, measuring nearly two inches, is found about rocks, and under the arches of bridges, &c., subject to the tide.

We have now described the principal genera of British Insects; and shall add some remarks on the *language* of insects, their *torpidity* during the winter season, and their sudden revival when exposed to heat.

Language of Insects.

Those insects which are brought forth, and live in society, who mutually assist each other in constructing works for the common good and accommodation, seem to have the greatest need of an extensive language. Being destined to form one large family, to give mutual aid and support to each other in all their common wants and operations, a species of *language*, and that not very limited, seems to be absolutely necessary to enable them to understand and to execute the different labours allotted to them with that regularity and harmony, which is so remarkable in the magnificent structures erected by bees, wasps, and many other gregarious insects. Bees, as well as flies of every kind, make a humming noise by the vibrations of their wings. But the noise of the bee, when flying home with its load, is very different, even to our comparatively blunt ears, from that which it utters after arriving at the hive, where it makes a peculiar noise, which is perfectly understood by the working bees, who instantly come and carry off this fresh supply of materials.

Common flies, and particularly the large flesh-flies, make a soft *singing* kind of noise when flying about in tranquillity. But, when alarmed, or when entangled in the web of a spider, the *noise* of their wings intimates distress and terror. Instead of being soft and agreeable, it is then loud, quick, harsh, and interrupted, precisely analogous to the language and cries of men and of the larger animals when placed in similar circumstances. Mr. Smellie¹ thinks it more than probable that the common house-fly is endowed with the faculty of *hearing*. Whenever we perceive that effects and movements are uniformly produced by certain sounds, it may be concluded that the animal is furnished with organs of

¹ Philosophy of Natural History, vol. ii, p. 434.

hearing, though, from their minuteness, we are unable to discover where they are situated. In the winged tribes of insects, it is probable that the organs of hearing are placed near the insertion of the wings, or, at least, that nerves or vessels proceed from the wings to the more immediate organs of hearing, which may be inclosed under that elastic, crustaceous substance with which the head is covered. This idea will be rendered still more probable by attending to the various modulations of sounds produced by the vibrations of the wings, and by comparing these with the present situation and employment of the insect. When a common fly is irritated or terrified, the noise made by the vibrations of its wings is very different from that produced when the animal is flying about undisturbed. When a house or a flesh-fly is tormented by thoughtless children, who, for amusement, often insert pretty large pins into the bodies of these insects, which the animals, with much pain, are obliged to trail after them, the noise of their wings is then highly expressive of impatience and of torture. But when they meet with food agreeable to their taste, the sound of their wings is soft, gentle, and even melodious. When a fly wishes to express joy, the noise of its wings is brisk and sharp, and easily distinguishable from that produced by the insect when it is excited by terror or any embarrassing or painful sensation. Though the eyes of flies consist of numerous lenses, so situated that they can see objects all around them, yet these lenses are so minute and so convex, that they can perceive objects at small distances only.

The ticking noise produced by some insects, which has been already noticed, is, without question, a kind of *language*. Some spiders, when they wish to communicate with each other, have a mode of striking against the wall nine or ten times, which signal is immediately understood by their companions.

Torpidity of Insects.

Spiders pass the winter season in a dormant state, inclosed in their own webs, and placed in some concealed corner. Like the torpid mammalia, they speedily revive when exposed to intense cold, and strive to obtain a more sheltered spot. Many insects which are destined to survive the winter months become regularly torpid by a cold exceeding 40° . The house-fly may always be found in the winter season, torpid, in some retired corner; but exposure for a few minutes to the influence of a fire recalls it to activity. Even some of the lepidopterous insects, which have been hatched late in the season, possess the faculty of becoming torpid during the winter, and thus have their life prolonged beyond the ordinary period. These insects can all be preserved from becoming torpid by being placed in an agreeable temperature, as the following experiments of Mr. Gough¹ testify. In speaking of the hearth cricket he says, 'They who have attended to the manners of this familiar insect will know that it passes the hottest part of the summer in sunny situations, concealed in the crevices of walls and heaps of rubbish. It quits its summer abode about the end of August, and fixes its residence by the fireside of the kitchen or cottage, where it is as merry at Christmas as other insects are in the dog-days.' Thus do the comforts of a warm hearth afford the cricket a safe refuge, not from death, but from temporary torpidity, which it can support for a long time, when deprived by accident of artificial warmth. 'I came to the knowledge of this fact,' he says, 'by planting a colony of these insects in a kitchen, where a constant fire is kept through the summer, but which is discontinued from November to June, with the exception of a day once in six or eight weeks. The crickets were brought from a distance, and set at liberty in

¹ Nicholson's Journal, vol. xix, p. 162.

this room in the beginning of September 1806 : here they increased considerably in the course of two months, but were not heard or seen after the fire was removed. Their disappearance led me to conclude that the cold had killed them : but in this I was mistaken ; for, a brisk fire being kept up for a whole day in the winter, the warmth of it invited my colony from their hiding-place, but not before the evening, after which they continued to skip about and chirp the greater part of the following day, when they again disappeared ; being compelled by the returning cold to take refuge in their former retreats. They left the chimney-corner on the 28th of May, 1807, after a fit of very hot weather, and revisited their winter residence on the 31st of August. Here they spent the summer merely, and lie torpid at present (Jan. 1808) in the crevices of the chimney, with the exception of those days on which they are recalled to a temporary existence by the comforts of a fire.'

At the commencement of our Introduction, several of the advantages to be derived from the study of Entomology were pointed out, particularly as it regards a more perfect acquaintance with the Insects of our native country ; but there is one other benefit to be derived from this pursuit, which is too important to be passed over,—its value in the *education of youth*. This has been forcibly stated by Messrs. Kirby and Spence, in the preface to their amusing '*Introduction to Entomology*,' and with these sensible observations we shall conclude. All modern writers on the momentous subject of Education unite in recommending, in this view, *Natural History* ; and if 'the quality of accurate discrimination—the ready perception of resemblances among diversities, and still more the quick and accurate perception of diversity in the midst of resemblances—constitutes one of the most important operations of the understanding ; if it be indeed the foundation

of clear ideas, and the acquisition of whatever can be truly called knowledge depends most materially on the possession of it:—if ‘the best logic be that which teaches us to suspend our judgments;’ and ‘the art of seeing, so useful, so universal, and yet so uncommon, be one of the most valuable a man can possess,’—there can be no doubt of the judiciousness of their advice. Now, of all the branches of Natural History, *Entomology* is unquestionably the best fitted for thus disciplining the mind of youth; and simply from this circumstance, that its objects have life, are gifted with surprising instincts admirably calculated to attract youthful attention, and are to be met with every where. This study will also afford an excellent method of strengthening their habits of observation, attention, and memory, equal perhaps, in this respect, to any other mental exercise: they will likewise be provided in their old age with an object capable not merely of keeping off that *tedium vitæ* so often inseparable from the relinquishment of active life, but of supplying an un-failing fund of innocent amusement, an incentive to exercise, and consequently no mean degree of health and enjoyment.

It is not meant to undervalue the good effects of the study of *Botany* or *Mineralogy*: but it is self-evident that nothing inanimate can excite such interest in the mind of a young person as beings endowed with vitality, exercising their powers and faculties in so singular a way; which are not only alive themselves, but confer animation upon the leaves, fruits, and flowers that they inhabit; which every walk offers to view; and on which new observations may be made without end. Besides these advantages, no study affords a fairer opportunity of leading the young mind by a natural and pleasing path to the great truths of *Religion*, and of impressing it with the most lively ideas of the power, wisdom, and goodness of the CREATOR.

Select Books on British Insects.

1. *General British Entomology*.—Albin's History of English Insects, 4to, 1749.—Harris's Exposition of English Insects, arranged on Fifty-one coloured Plates, exhibiting nearly Five Hundred Figures, 4to, 1776-82.—Barbut's Genera of English Insects, 4to, 1781.—Donovan's Natural History of British Insects, illustrated by coloured Figures, 16 vols. royal 8vo, 1792-1818.—Marsham's Entomologia Britannica, vol. 1, Coleoptera, 8vo, 1802. Some very interesting particulars of British Insects will be found in the *third* volume of Mr. Bingley's *Animal Biography*, a work admirably adapted for the perusal of young persons: Messrs. Kirby and Spence's volumes offer likewise an endless source of entertainment and instruction. Mr. Graves's *Naturalist's Pocket Book* furnishes some good directions for taking and preserving Insects and other objects of Natural History; and Mr. Samouelle's *Entomologist's Compendium* contains a very useful CALENDAR of the times and appearance, and usual situations, of 3000 Species of British Insects; an account of the modern System of Entomology, and a variety of other interesting matter.—Taylor's *Anecdotes of remarkable Insects* is a pretty book for young persons. Notwithstanding the works just enumerated, we are still in want of a *compendious Treatise on British Insects*, with coloured plates, so as to form a useful and agreeable pocket companion in our rambles: until such a work appears, we must supply its place with Mr. Wood's *Linnean Genera*, already noticed.—Adams's Essay on the Microscope, 4to, 1787, should be in the hands of every Entomologist.

2. *Particular British Entomology*.—BUTTERFLIES and MOTHS. Lewin's British Butterflies, 4to.—Harris's Butterflies and Moths, fol. 1766.—Butterflies, Moths, and the Plants they feed on, by Wilkes, 4to, 1773.—Martyn's *Psyche*, or Figures of rare Moths and Butterflies, 4to, 1797.—Specimens of Butterflies, from Mr. Lee's Collection, fol. 1806.—Haworth's *Prodromus Lepidopterorum Britannicorum*, being a concise Catalogue of British Lepidopterous Insects, with the Times and Places of Appearance in the Winged State, 4to, 1802.—Haworth's *Lepidoptera Britannica*, 8vo, 1863. BEES.—Mr. Kirby's *Apum Angliæ Monographia*, 8vo, 2 vols.—Huish's Treatise on Bees, 8vo, and his *Cottager's Manual*, 12mo.—On the modern practical management of Bees, as adopted by Mr. Espinasse, consult Jennings's Family Cyclopædia, art. BEE, or the Transactions of the Society of Arts, vol. xxxvi. SPIDERS.—Martyn's Natural History of Spiders, 4to, 1736. CESTRI.—Bracy Clark's Treatise on the Bots of Horses and other Animals, 4to, 1815.—For a list of books on *Entomology in general*, we refer to Time's Telescope for 1820, p. lxviii.

TIME'S TELESCOPE

FOR

1823.

JANUARY.

THE name given to this month by the Romans was taken from JANUS, one of their divinities, to whom they gave two faces; because, on the one side, the first day of this month looked towards the new year, and, on the other, towards the old one.

Remarkable Days

In JANUARY 1823.

1.—CIRCUMCISION.

THIS festival was instituted in the sixth century, to commemorate the circumcision of our Saviour. This is also *New Year's-day*, which has ever been considered a season of joy and congratulation for blessings received and dangers escaped in the past year. The antient custom of going about with the *wassail*, 'a bowl of spiced ale,' on New Year's-eve, Twelfth-night, and Christmas-eve, is still kept up in many places. See our last volume, pp. 1-3. *New Year's gifts* were formerly presented on this day, in England, by the husband to the wife, the father to the child, or the master to the servant; reversing the Roman custom, which was generally from the inferior to the superior. The gifts were not confined to par-

A

ticular things, though some were preferred to others, and they appear to have been offerings peculiar to the season, and made more for ceremony's sake, than for a token of remembrance, or for value. An orange stuck full of cloves was one of this class. Eggs dyed of different colours were also sent as presents, particularly red ones; which was the favourite colour of the Celtic nations. It is remarkable that a similar custom prevailed in Persia at the beginning of the last century, when they celebrated the commencement of their solar year by a feast, at which they gave each other coloured eggs. Verses in the shape of compliment or congratulation were formerly sent as new year's gifts, and were, consequently, plenty enough during the season. An old tract, treating of this custom, says, 'The poets get mightily that day (new year's day) by their pamphlets, for a hundred elaborate lines shall be lesse esteemed then in London than a hundred of Wansfleet oysters at Cambridge.' The English nobility formerly sent the king a purse of gold, as a new year's gift; a custom derived, without doubt, from that observed by the Roman knights toward the emperors. The Law Society of Lincoln's Inn, as they were formerly great observers of Christmas, so they were accustomed to greet new year's-day with mirth and good fellowship. The seat of the King of Christmas in the hall was filled by his marshal, and the master of the revels supplied the vacant seat of the marshal thus elevated to the throne of the sovereign. In truth, the gentlemen of Lincoln's Inn seem to have lived 'righte merrily' in antient times, and never to have missed any excuse for a wassailing of which they could avail themselves.

The new season (observes a modern writer) seems naturally to bring with it anticipations of good fortune, and thus it heightens the deceptions which reconcile us to life, or rather increase our love of it. In truth, the entrance of the new year has peculiar

charms:—the lengthening days, the earth about to rise from the cheerless sleep of winter, the exhilarating feelings at the approach of Spring, the incipient song of birds, the increasing sunshine, are all calculated to repress sad thoughts by the delicious sensations they inspire. It is the character of human nature to fling itself confidently upon the future, and even to ‘leap amid its darkness.’ The past is beyond our power, the present is become the past ere we can reflect upon it: man, therefore, has only the future for the haven, in which he can anchor his little-bark of expectations, and he looks to it with delight, always flattering himself that there he shall find good holding-ground, and see

The seas for ever calm, the skies for ever bright.

The greetings and wine-cups that usher in the new year are not wholly empty ceremonies. The division of time entered upon has a thousand hopes on its wings. We are dependent upon it for many things which we have to achieve, or which we promise ourselves will be achieved for us.

The merry village-bells ring in the stranger year over the generations sleeping insensibly beneath them. To a thousand ears in the full flush of life, youth, and health, they waft sounds of gladness, and

Another year, and then those sounds shall hail

The day again, and gladness fill the vale.

‘Another year,’ and again the ‘jolly rebecks’ will sound and the same merriment be repeated, for even the pleasures of life are but a string of such stale repetitions. Still let us make the most of them, and not live too much upon those of ‘to-morrow, and to-morrow, and to-morrow,’ but endeavour to employ and enjoy well the present time: let us be more anxious to be able to call truly our past years happy ones at their conclusion, than to hope at the beginning that each new one may turn out to be so.

New Year's-day in Paris is the most remarkable

day in the whole year; all the shops are shut,—labour suspends his toil,—commerce reposes on her oars,—and the philosopher postpones his studies; nature and nature's son enjoy a universal holiday. For several weeks preceding new year's-day, various classes of ingenious artists employ all their talents and skill, to shine with an uncommon lustre on the auspicious opening of the new year; these are the confectioners, the embossers of visiting cards, the jewellers, &c.; and their shops on this day display a degree of taste and magnificence difficult to describe, and totally unknown in England. This is the day of universal greetings, of renewing acquaintance, of counting how many links have been broken by time last year in the circles of friendship, and what new ones have replaced them. All persons, whatever may be their rank, degree, or profession, form a list of the names of persons whose friendship they wish to preserve or cultivate; to each of these persons a porter is sent to deliver their card. Those more particularly connected with them by blood or friendship, are visited in person; and all who meet embrace on this happy day. Millions of cards are distributed; and nothing is seen in the streets but well dressed persons going to visit their friends and relations, and renew, in an affectionate manner, all the endearing charms of friendship. On this day, too, parents, friends, and lovers, bestow their presents on the various objects of their affection, and pour so many draughts of the most delightful balm that human nature can partake.

6.—EPIPHANY, or TWELFTH-DAY.

The rites of this day, the name of which signifies an *appearance of light*, or a *manifestation*, are different in various places, but all in honour of the Eastern Magi.—For an account of a very antient and singular custom, which takes place, in various parts of the continent, on the eve of this day, see our last volume, pp. 4, 5.

In the antient calendar of the Romish church, there is an observation on the 5th day of January, the eve or vigil of the Epiphany: 'Kings created or elected by beans.' The 6th is called 'The Festival of Kings,' with this additional remark, 'that the ceremony of electing kings was continued with feasting for many days.' In the cities and academies of Germany, the students and citizens choose one of their own number for king, providing a most magnificent banquet on the occasion. In France, during the *ancien regime*, one of the courtiers was chosen king, and the nobles attended on this day at an entertainment.

With the French, 'Le Roi de la Fève' signifies a Twelfth Night King; and they have a proverb, 'Il a trouvé la fève au gâteau,' signifying, 'he is in luck,' &c. but, literally, 'he has found the bean in the cake.'—In the *Anthologie Française* for 1817, this subject is thus happily moralized:—

Les Rois de la FEVE.

En ce jour le sort m'est propice,
Et sur le trône il m'a porté;
Amis, que l'on se réjoisse,
Pour célébrer ma royauté.
Mon règne n'étant qu'un beau rêve,
Prolongez mon heureux sommeil;
Car vous me direz au réveil:
'Tu n'étais qu'un Roi de la fève.'

Nous voyons souvent sur la scène
César, Auguste, Agamemnon;
Mais les enfans de Melpomène
De ces grands Rois n'ont que le nom.
Alors que la pièce s'achève
Se dissipe l'illusion;
César, Auguste, Agamemnon,
Ne sont que des Rois de la fève.

Si le bonheur est sur le trône,
J'en jouirai quelques momens;
Mais si la gloire l'environne,
Elle en cache aussi les tourmens.

Quand vers les cieux mon œil s'élève,
Je dis : ' Ces Rois si grands, si fiers,
Devant le Roi de l'Univers,
Que sont-ils ? des Rois de la fête.'

The evening and early part of the night of the Epiphany in Rome is a feast particularly dear to children. Not that they draw king and queen as we do, but there are cakes and sweetmeats and fruit, and, in short, all good things, sold and given away upon the occasion. The Piazza della Rotonda is particularly distinguished by the gay appearance of the fruit and cake-stalls, ornamented with flowers and lighted with paper lanterns. Persons dressed up to resemble the pictures of Mother Bunch or Mother Goose, and called Beffana, are led about the streets, and a great deal of popular wit is displayed. But these visible Beffanas are nothing in importance to the invisible. When the children go to bed, each hangs up a stocking near the pillow. If the child has been *good*, the stocking is filled with sweetmeats and cakes before morning; but if *naughty*, the Beffana puts nothing but stones and dirt into it, and we have seen (says Mrs. Graham) many a smile and many a tear occasioned by the impartial gifts of the Beffana.

The *Carnival* commences on Twelfth-day, and usually holds till Lent. During this festival at Paris, the grand annual procession of a *Fat Ox*, with all its motley accompaniments of buffoonery, the glory of Paris, and the pride and joy of the Boulevards, lasts for three whole days together. A great improvement was made in the procession of the Fat Ox this year (1822), for the first time. Formerly the child who represents Cupid used to sit in a chair on the back of the ox; but this year the ox was led first covered with a fine pall, and Cupid sat on a canopied throne, fixed on a triumphal car, in which there were other smiling loves like himself.

A curious species of carnival spectacle was prepared and executed by Pietro di Cosimo, a Florentine painter, who flourished shortly after Leonardo da Vinci. It consisted of processions of three or four hundred persons, dressed to represent particular stories, with much splendour and whimsicality. On one occasion he got up, with great secrecy, the *Triumph of Death*, which was performed by torch-light: a black car was drawn by black buffaloes, and painted with skulls and crosses; Death sat triumphant on his throne, surrounded by yawning sepulchres, from which, at every halt, the dead arose, and sang a dolorous music. Several men on horseback, painted to represent skeletons, were the escort, with *stafferi*, dressed as the mutes at funerals, bearing black torches. The black standard of Death, with skulls and cross-bones, was borne aloft, while a mourning band thundered forth the *miserere*. The terrified people at first fled in horror; but, struck with the novelty, soon returned; and Pietro, as Vasari tells, was loaded with praises (*sommamente lodato*). Andrea del Sarto, his pupil, assisted in the execution of this triumph, which was supposed to allude to the return of the Medici, then banished from Florence. It was the bad taste of the day thus to mingle sacred and profane allusions: in the midst of this Carnival festival, they sang the 50th Psalm.

For an interesting account of the '*Carnival at Rome in 1820*,' we must refer to our last vol., pp. 5-9. The following sensible observations on this Festival are from the pen of an acute modern writer:—'The Carnival is the wreck of one of those popular institutions which can flourish only in barbarous times, and in days of rude and profound ignorance. As knowledge spreads, such periodical excitements to relaxation and pleasure gradually lose their influence; and their last efforts are still exerted in Italy by the sole patronage and protection of the church and govern-

ment. Under the French regime, the carnival nearly fell into disuse; and though in every community there will always be found a sufficient number of the dissipated and the idle to obey the call of pleasure, yet the marked difference between the carnival, as we saw it in 1820, and in the various accounts which remain of its festivities in preceding ages, down to the latter end of the eighteenth century, prove how far the people of Rome have got the start of their government, and how little comparative interest such institutions are now calculated to excite. To the period, nearly, of the French Revolution, the Carnival at Rome was characterized by great magnificence; complicated machinery was brought into play, and dramas were acted in the streets. All the heathen gods and goddesses were personified by persons of wealth and condition: the highest ranks were not excluded by fashion or taste from joining in the festivity; and princes and princesses performed the parts which are now entrusted to butchers and their wives, or to persons below the rank of gentry. To maintain a character would now be supreme *mauvais ton*. The nobles, in their closed carriages, drive for an hour up and down the Corso each day; the *mezze dame*, with their husbands or cavaliers, occasionally put on a domino and mask to join the crowd, for the purpose of quizzing or rallying some friend or relation; but the great support of the carnival is the multitude of foreigners, who crowd to Rome to witness a spectacle to which they themselves principally contribute. The novelty of the scene has an attraction for them, which is wanting to the Italians; and to the foreign visitants the carnival and other church festivals owe their principal splendour.

After the first two days, however, even the spirits of strangers begin to flag; and after the first sensations subside, the barbarous character of the institution appears in its true symptoms of puerility,—

forced mirth, and real dulness. Man is not made for stated seasons of hilarity, nor to put on and put off his cares by act of parliament. To judge by individual sensations, nothing in the range of pleasurable pursuit can be more wearisome to the mind, more solemnly dull, than the last days of the carnival, when the exhaustion of animal spirits damps the very little stock of wit which the occasion sets afloat; when amusement is reduced to flinging lime in the morning, and in the evening to hearing complaints of inflamed eyes, of spoiled dresses, ennui, disappointed expectation, and congratulations on the approaching termination of the week.

‘The fair and bright side of the carnival is to be found in the gentleness, the urbanity, and good humour of the people: neither the security of disguise, nor the privilege of the mask, can urge these kindly disposed Italians to wound the feelings of an enemy, or trifle with the frailties of a friend.’

8.—SAINT LUCIAN.

Lucian, a native of Syria, was celebrated in his youth for his eloquence and intimate acquaintance with polite literature. After the death of his parents, he gave all his fortune to the poor; and confined himself to the study of the scriptures. He was a proficient in the Hebrew, and revised the Septuagint version of the Bible. He wrote an apology for the Christians, and presented it to Maximinus II. After having undergone various torments at the instigation of this emperor, he was martyred in the year 312.

13.—SAINT HILARY.

Hilary was born at Poitiers in France, of an illustrious family; and of this place he was chosen bishop in the year 353. Having taken an active part against the Arians, he was banished to Phrygia, by order of the Emperor Constantius, in 356, where he remained for three years. After various travels in different parts, and many sufferings, Hilary died at

Poictiers in 368. He was an excellent orator and poet; his style abounds with rhetorical figures.

13.—PLOUGH MONDAY.

Some curious ceremonies are still observed on this day, in the northern counties, particularly in Yorkshire.—See our last volume, p. 9.

*17.—SAINT ANTHONY.

In T.T. for 1822, p. 10, we gave an account of the annual Benediction of Beasts at Rome: the following is the method of observing St. Anthony's-day at *Madrid*.—On the feast of this renowned patron of Spain, the tutelar saint of all tailors, a peculiar ceremony takes place with horses and mules: they receive the blessing, in St. Anthony's church, which is to protect them throughout the whole year from disorders and sinister accidents. All the morning, a number of coachmen, with their horses and mules cleaned and trimmed out, are seen to stop before the church; each of them has a certain quantity of barley with him, and all wait with anxiety for the benediction. The monk appears; the beasts and the barley are consecrated, and the coachmen gallop off in triumph. N.B. One half of the barley must be given to the church.

In the afternoon, when the *siesta* is over, the real ceremony takes place. A kind of procession, with horses, mules, and carriages, is seen to drive round St. Anthony's church, and the adjacent streets, with as much festive solemnity as on any other occasion. Coachmen, servants, equipages, but particularly the mules, must then be decorated in the best manner: they rival each other in tasteful and tasteless ornaments; it is, properly speaking, the *feast of the mules*. Never had the ribbon-manufacturers or the saddlers so much work bespoke; never have the mule-dressers so much to do as in the last week before St. Anthony's-day. It is indeed worth while to look at their procession for a few minutes. The coachmen

wear their laced gala liveries, long stiff tails, shining boots, and broad silver spurs, with as pious, grave, and diplomatic a mien, as if they carried the host. Most of them are Asturians, who have such a point of honour among them, as is scarcely to be met with among the brothers of the whip in England. However tedious this procession may be, yet the people of Madrid deem it a very entertaining spectacle, owing to the great number of spectators, on the balconies and in the streets. They look at the different equipages; they criticise them; and coachmen and males pass in a kind of review. The parties throw sweetmeats or small oranges at each other, and divert themselves in honour of St. Anthony.

18.—SAINT PRISCA.

Prisca, a Roman lady, was early converted to Christianity; but refusing to abjure her religion, and to offer sacrifice when she was commanded, was horribly tortured, and afterwards beheaded, under the Emperor Claudius, in the year 275.

*18.—LA FESTA DI CATTEDRA,

Or commemoration of placing the supposed Chair of St. Peter, is thus described by a recent traveller: 'At the extremity of the great nave of St. Peter's, behind the altar, and mounted upon a tribune, designed or ornamented by Michael Angelo, stands a sort of throne, composed of precious materials, and supported by four gigantic figures. A glory of seraphim, with groups of angels, sheds a brilliant light upon its splendours. This throne enshrines the real, plain, worm-eaten wooden chair, on which St. Peter, the Prince of Apostles, is said to have pontificated; more precious than all the bronze, gold, and gems, with which it is hidden, not only from impious but from holy eyes, and which once only, in the flight of ages, was profaned by mortal inspection. The Festa di Cattedra is one of the very few functions, as they are called (*funzioni*), celebrated in St. Peter's.

The splendidly dressed troops that line its nave, the church and lay dignitaries—abbots, priests, canons, prelates, cardinals, doctors—dragoons and senators, all clad in various and rich vestments, marching in procession—complete, as they proceed up the vast space of this wondrous temple, a spectacle nowhere to be equalled within the pale of European civilization. In the midst of swords and crosiers, of halberds and crucifixes, surrounded by banners, and bending under the glittering tiara of threefold power, appears the aged, feeble, and worn-out POPE, borne aloft on men's shoulders, in a chair of crimson and gold, and environed by slaves (for such they appear), who waft, from plumes of ostrich feathers mounted on ivory wands, a cooling gale, to refresh his exhausted frame, too frail for the weight of such honours. All fall prostrate as he passes up the church to a small chair and throne, temporarily erected beneath the chair of St. Peter. A solemn service is then performed, hosannas arise, and royal votarists and diplomatic devotees parade the church, with guards of honour and running footmen; while English gentlemen and ladies scramble, and crowd, and bribe, and fight their way to the best place they can obtain.'—(*Italy*, vol. ii, pp. 283, 284.)

20.—SAINT FABIAN.

St. Fabian succeeded St. Anterus in the pontificate in the year 236. He governed the church sixteen years, sent St. Dionysius and other preachers into Gaul, and condemned Privatus, the promoter of a new heresy in Africa, as appears from St. Cyprian. St. Fabian died a glorious martyr in the persecution of Decius in 250, as St. Cyprian and St. Jerom bear witness.

21.—SAINT AGNES

Has been always considered by the Catholics as a special patroness of purity, with the immaculate Mother of God and St. Thecla. Rome was the

theatre of the triumph of St. Agnes; and Prudentius says, that her tomb was shown within sight of that city. She suffered not long after the beginning of the persecution of Dioclesian, whose bloody edicts appeared in March in the year of our Lord 303. She was only thirteen years of age at the time of her glorious death.—See our last volume, pp. 12, 13, for some beautiful lines on this subject by Mr. Keats.

*22. 1788.—LORD BYRON BORN.

In our volume for 1820, p. 21, we have given some account of his lordship's early poems, and of the reception which they met with from the *Edinburgh Review*; and in *T.T.* for 1817, p. 6, will be found a specimen from the 'Hours of Idleness.' As this volume is but little known, we shall continue the selection with the following beautiful stanzas, written at the age of *seventeen*, which display, in every line, the thoughts, feelings, and diction of the future poet—the splendid blossoms of that tree which was destined to bear so rich and promising a harvest of Hesperian fruit.

I would I were a careless child,
 Still dwelling in my Highland cave,
 Or roaming through the dusky wild,
 Or bounding o'er the dark blue wave:
 The cumbrous pomp of Saxon¹ pride
 Accords not with the freeborn soul,
 Which loves the mountain's craggy side,
 And seeks the rocks where billows roll.
 Fortune! take back these cultured lands,
 Take back this name of splendid sound!
 I hate the touch of servile hands,
 I hate the slaves that cringe around:
 Place me among the rocks I love,
 Which sound to Ocean's wildest roar,
 I ask but this—again to rove
 Through scenes my youth hath known before.

¹ Sassenagh, or Saxon, a Gaelic word, signifying either Lowland or English.

Few are my years, and, yet, I feel
 The world was ne'er designed for me ;
 Ah ! why do dark'ning shades conceal
 The hour when man must cease to be ?
 Once I beheld a splendid dream,
 A visionary scene of bliss ;
 Truth ! —wherefore did thy hated beam
 Awake me to a world like this ?

I loved—but those I loved, are gone ;
 Had friends—my early friends are fled :
 How cheerless feels the heart alone,
 When all its former hopes are dead !
 Though gay companions, o'er the bowl,
 Dispel awhile the sense of ill,
 Though Pleasure stirs the madd'ning soul,
 The heart—the heart is lonely still.

How dull ! to hear the voice of those
 Whom rank or chance, whom wealth or power,
 Have made, though neither friends nor foes,
 Associates of the festive hour :
 Give me again a faithful few,
 In years and feelings still the same,
 And I will fly the midnight crew,
 Where boist'rous joy is but a name.

And Woman ! lovely Woman, thou !
 My hope, my comforter, my all !
 How cold must be my bosom now,
 When e'en thy smiles begin to pall.
 Without a sigh would I resign
 This busy scene of splendid woe,
 To make that calm contentment mine,
 Which Virtue knows, or seems to know.

Fain would I fly the haunts of men,
 I seek to shun, not hate mankind ;
 My breast requires the sullen glen,
 Whose gloom may suit a darkened mind.
 Oh ! that to me the wings were given
 Which bear the turtle to her nest !
 Then would I cleave the vault of Heav'n,
 To flee away, and be at rest ¹.

¹ Psalm lv, ver. 6.—‘ And I said, Oh ! that I had wings like a dove, then would I fly away and be at rest.’ This verse also constitutes a part of the most beautiful anthem in our language.

The following *fragment* was written at the early age of *fifteen*, and is singularly prophetic of that noble fame which awaited the productions of Lord Byron's Muse in subsequent years :—

When to their airy hall my father's voice
 Shall call my spirit, joyful in their choice ;
 When, poised upon the gale, my form shall ride,
 Or, dark in mist, descend the mountain's side ;
 Oh ! may my shade behold no sculptured urns,
 To mark the spot where earth to earth returns ;
 No lengthened scroll, no praise-encumbered stone ;
 My epitaph shall be, my name alone :
 If *that* with honour fail to crown my clay,
 Oh ! may no other fame my deeds repay ;
That, only *that*, shall single out the spot,
 By that remembered, or with that forgot.

25.—CONVERSION OF ST. PAUL.

Saint Paul suffered martyrdom under the general persecution of Nero. Being a Roman citizen, he could not be crucified by the Roman laws, as his colleague St. Peter was ; he was therefore beheaded :—hence the usual representation of him with a sword in his hand.—See an account of a *Sicilian* festival in honour of this day, in T.T. for 1821, p. 13, and T.T. for 1820, p. 20.

26.—SEPTUAGESIMA SUNDAY.

The institution of this and the two following Sundays cannot be traced higher than the beginning of the sixth or the close of the fifth century. ' When the words Septuagesima, Sexagesima, and Quinquagesima (seventieth, sixtieth, and fiftieth), were first applied to denote these three Sundays, the season of Lent had generally been extended to a fast of six weeks, that is, thirty-six days, not reckoning the Sundays, which were always celebrated as festivals. At this time, also, the Sunday which we call the first Sunday in Lent, was styled simply *Quadragesima*, or the fortieth ; meaning, no doubt, the fortieth day before Easter. *Quadragesima* was also the name given to the season of Lent, and denoted the quadra-

gesimal or forty days' fast. When the three weeks before Quadragesima ceased to be considered as weeks after the Theophany (or Epiphany), and were appointed to be observed as a time of preparation for Lent, it was perfectly conformable to the ordinary mode of computation to reckon backwards, and, for the sake of even and round numbers, to count by decades.'—(*Shepherd.*)

29. 1820.—K. GEORGE THE FOURTH'S ACCESSION.

30.—KING CHARLES I, MARTYR.

For many interesting particulars of this day consult our former volumes.

31. 1820.—KING GEORGE IV PROCLAIMED.

*JAN. —. 1726.—DR. GEORGE SEWELL DIED.

He was author of *Sir Walter Raleigh*, a tragedy; several papers in the fifth volume of the *Tatler*, and ninth of the *Spectator*; a *Life of John Philips*; and some other things. There is something melancholy in this poor man's history. He was a physician at Hampstead, with very little practice, and chiefly subsisted on the invitations of the neighbouring gentlemen, to whom his amiable character made him acceptable; but at his death not a friend or relative came to commit his remains to the dust! He was buried in the meanest manner, under a hollow tree, that was once part of the boundary of the churchyard of Hampstead. No memorial was placed over his remains.

VERSES,

Said to be written by the Author on himself when he was in a Consumption.

Why, Damon, with the forward day,
Dost thou thy little spot survey,
From tree to tree, with doubtful cheer,
Pursue the progress of the year,
What winds arise, what rains descend,
When thou before that year shalt end?

What do thy noontide walks avail,
To clear the leaf, and pick the snail,

Then wantonly to death decree
 An insect usefuller than thee?
 Thou and the worm are brother-kind,
 As low, as earthy, and as blind.
 Vain wretch! canst thou expect to see
 The downy peach make court to thee?
 Or that thy sense shall ever meet
 The bean-flower's deep-embosomed sweet,
 Exhaling with an evening blast?
 Thy evenings then will all be past.
 Thy narrow pride, thy fancied green,
 (For vanity's in little seen)
 All must be left when Death appears,
 In spite of wishes, groans, and tears;
 Nor one of all thy plants that grow,
 But rosemary will with thee go.

Astronomical Occurrences

In JANUARY 1823.

Obliquity of the Ecliptic.

WE have already explained the nature and variation of this obliquity, particularly in the volumes for 1816 and 1817; we shall therefore merely give its quantity for several epochs during the present year. These are as follow, viz.

January . . . 1st, the obliquity is . . .	23° 27' 51·6"
April . . . 1st,	23 27 51·7
July . . . 1st,	23 27 50·0
October . . 1st,	23 27 50·0
December . 1st,	23 27 48·4

The equations of the equinoctial point for the several periods usually computed during this year are, viz.

January . 1st, the equation is	+14·1"
April . . . 1st,	+15·0
July . . . 1st,	+15·8
October . . 1st,	+16·4
December 1st,	+17·1

SOLAR PHENOMENA.

The Sun enters Aquarius at 48 m. after 6 in the evening of the 20th of this month. He will also be

eclipsed on the morning of the 12th, but the eclipse will not be *visible* at Greenwich, as the following are its characteristics, viz.

Conjunction 53 m. 45 s. after 8 in the morning

In longitude 9 s. $21^{\circ} 26'$

Moon's latitude . 1 24 North.

The Sun will also rise and set at the following times during this month. It may, however, be necessary to inform the youthful student that these times are calculated for the first meridian of Britain; but they may readily be reduced to any other meridian by adding or subtracting the time answering to the difference of longitude, computed at the rate of 15° to an hour. The time corresponding to any intermediate period may also be readily found by proportion.

TABLE

Of the Sun's Rising and Setting for every fifth Day.

January 1st, Sun rises	5 m. after 8.	Sets	55 m. past 3
6th,	1	8	59
11th,	57	7	3
16th,	51	7	9
21st,	45	7	15
26th,	38	7	23
31st,	30	7	30

Equation of Time.

When the time is taken from a good sun-dial, the following table shows what must be added to it to obtain that which should be indicated by a well regulated clock at the same moment. For the sake of brevity, this is only given for noon of every fifth day of the month, but the quantity to be added at any intermediate time may readily be found by proportion, by saying, as 5 days is to the part of the period for which the quantity is required, so is the difference between the two adjacent numbers to the part of that difference to be added.

Example.—Suppose the equation were required for noon on the 9th, the difference between the 6th and the 11th being 2 m. 7 s., we should have 5 : 3 ::

2 m. 7 s. : 1 m. 16½ s., and therefore by adding this to 6 m. gives 7 m. 16½ s. for the equation at the time required.

TABLE

Of the Equation of Time for every fifth Day.

	m.	s.
Wednesday, Jan. 1st, to the time on the dial add	3	42
Monday, 6th,	6	0
Saturday, 11th,	8	7
Thursday, 16th,	9	59
Tuesday, 21st,	11	34
Sunday, 26th,	12	49
Friday 31st,	13	44

LUNAR PHENOMENA.

Phases of the Moon.

Last Quarter, 4th day, at 10 m. past 4 morning	
New Moon, 12th 54 8	
First Quarter, 20th 0 2	
Full Moon, 26th 11 5 afternoon.	

Moon's Passage over the Meridian.

The following table shows at what time the Moon will pass the meridian of the Royal Observatory on certain days during this month, when observations may be conveniently made, if the weather prove favourable. For any other meridian a slight reduction is necessary, which depends upon the longitude of the place as well as the Moon's horary motion.

TABLE

Of the Moon's Passage over the first Meridian.

January 3d, at 3 m. after	5 in the morning
4th, ... 47	5
5th, ... 30	6
6th, ... 14	7
7th, ... 1	8
8th, ... 38	9
18th, ... 31	4 in the afternoon
19th, ... 18	5
20th, ... 10	6
21st, ... 6	7 in the evening
22d, ... 6	8
23d, ... 10	9
24th, ... 15	10
25th, ... 17	11

On the 26th of this month the Moon will be totally

eclipsed, which will be partly visible at Greenwich; the circumstances being as follow, viz.

	<i>h.</i>	<i>m.</i>	<i>s.</i>
Beginning of the eclipse	3	24	55
Moon rises eclipsed	4	18	46
Beginning of total darkness	4	22	26
Ecliptic opposition	5	10	45
Middle	5	11	28
End of total darkness	6	40	30
Duration of total darkness	1	38	4
Whole duration of the eclipse	3	33	6
Digits eclipsed $20^{\circ} 47' 32''$.			

PHENOMENA PLANETARUM.

Phases of Venus.

We have already shown that the phases of this beautiful planet are subject to variation, like those of the Moon, and have explained the method by which they are calculated, as well as solved the problem relative to her maximum brilliancy (see T.T. for 1819); we shall therefore only give the results of these calculations for the first of each month in the present year.

January 1st, { Illuminated part = 11.99678 digits
Dark part = 0.00122

Venus is, therefore, very near the point of her greatest illumination; but our young readers should be reminded that this is by no means that of her greatest brilliancy. On this subject see T. T. for 1819, p. 51.

Eclipses of Jupiter's Satellites.

From the number of Jupiter's moons or satellites, and the rapidity with which their revolutions are performed, they are frequently eclipsed by passing through his shadow. These bodies, however, are too small for their eclipses to be subject to common observation, and indeed require a good telescope to observe them with accuracy. The young observer should also be at his telescope a little before the eclipse is expected to take place, that he may be able to observe it with all possible steadiness. To

assist him in these respects, we shall insert the times of such of the eclipses of the first and second satellites as are visible at Greenwich.

Emersions.

First Satellite, ... 1st day, at 25 m. 22 s. after 11 at night	
3d 54 ... 14	5 evening
9th 20 ... 46	1 morning
10th 49 ... 41	7 evening
17th 45 ... 13	9
24th 40 ... 52	11 night
26th 9 ... 45	6 evening
Second Satellite, 6th 15 ... 9	0 morning
23d 47 ... 18	6 evening
30th 23 ... 57	9

Form of Saturn's Ring.

For such explanations as are necessary to enable our readers to apprehend the principal circumstances of this singular phenomenon, we must refer to T.T. for 1819. We shall therefore only insert the results for every third month, leaving the calculations as exercises for our astronomical students.

January 1st, {	Transverse axis	1.000
	Conjugate axis	— 0.343

Transits and Altitudes of the Planets.

For the information of such of our readers as wish to observe the planets in their passage over the meridian, we shall insert the times of their transit for every 6th day, and their altitudes when on the first meridian. The time of passing any other meridian may also be readily found by adding or subtracting that answering to the difference of longitude; and the meridional altitudes will differ very little for any other part of Great Britain. From having the meridional altitude and the latitude of the place of observation, the *declination* may be obtained by simple subtraction, for it is always equal to the difference between the altitude and the co-latitude of the place. When the altitude is the greater quantity, the declination, in our latitude, is *north*; but when it is the less, it is *south*.

Example.—The meridional altitude of Mercury, at

the Royal Observatory, on the 1st of May, 1823, is $54^{\circ} 19'$; and as the co-latitude is $38^{\circ} 29'$, we have $54^{\circ} 19' - 38^{\circ} 29' = 15^{\circ} 50' \text{ N.}$ for the declination of the planet on that day.—Again, on the 1st of September, 1823, the altitude of Venus, when on the first meridian, is $26^{\circ} 46'$; and consequently her declination at that time will be $38^{\circ} 29' - 26^{\circ} 46' = 11^{\circ} 43' \text{ S.}$

TABLE
Of the Transits and Meridional Altitudes of the Planets.

	1st	7th	13th	19th	25th
	TRANSITS.				
	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
Mercury	11 56 <i>mor.</i>	0 15 <i>aft.</i>	0 30	0 46	1 1
Venus	0 9 <i>aft.</i>	0 16	0 22	0 28	0 33
Mars	1 19 <i>aft.</i>	1 13	1 6	1 0	0 53
Jupiter	8 5 <i>even.</i>	8 26	7 59	7 33	7 8
Saturn	7 21 <i>even.</i>	6 55	6 29	6 4	5 39
G. Sidus	11 48 <i>mor.</i>	11 24	11 0	10 36	10 9
	MERIDIONAL ALTITUDES.				
Mercury	$13^{\circ} 37'$	$14^{\circ} 23'$	$16^{\circ} 6'$	$18^{\circ} 45'$	$22^{\circ} 15'$
Venus	14 53	15 36	16 34	18 16	20 8
Mars	17 8	18 0	19 11	20 29	21 54
Jupiter	57 12	57 8	57 7	57 7	57 9
Saturn	48 48	48 46	48 49	48 53	48 59
G. Sidus	14 56	14 57	14 58	15 0	15 3

Other Phenomena.

Mercury will be in his superior conjunction about 1 in the morning of the 3d; and Saturn will be stationary on the 4th of this month. The Moon will be in conjunction with the bright star α in Scorpio, at 38 m. past 3 in the afternoon of the 8th; and, at the same time, Mercury will be in conjunction with Venus. They will consequently be seen above each other, Mercury being only $65\frac{1}{2}'$ south of Venus. The Moon will be in conjunction with Venus at 21 m. after 7 in the evening of the 12th; with Mercury at 34 m. past 10 the same night; and with Mars at 43 m. after 6 the next evening. Jupiter will be stationary on the 21st. Mercury will be in conjunction with Mars on the 22d, the former planet being at that time $27\frac{1}{2}'$ south of the latter. Saturn will also be in quadrature at 45 m. past 7 in the morning of the 24th.

Thus the celestial phenomena of this month supply the young astronomer with numerous opportunities of exercising his powers of observation; and, by combining practice with theory, of advancing in his progress up the mount of that sublime science. But while he thus climbs the steep ascent, and surveys that cerulean vault, so gloriously illuminated with celestial radiance, the sensible mind will feel more than ever grateful for that faculty which enables him to enjoy this astonishing spectacle, and

Take in, at once, the landscape of the world
At a small inlet, which a grain might close,
And half creates the wonderous world we see. YOUNG.

Ought he not, too, on contemplating such a scene, to experience something of the feeling expressed by the same poet, when he exclaims,

Who turns his eye on Nature's midnight face
But must inquire—'What hand behind the scene,
'What arm Almighty, put these wheeling globes
'In motion, and wound up this vast machine?
'Who rounded in his palm those spacious orbs?
'Who bowled them flaming thro' the dark profound,
'And set the bosom of old Night on fire?'
Nature's Controller, Author, Guide, and End!

The Naturalist's Diary

For JANUARY 1823.

Thou hast thy beauties : sterner ones, I own,
Than those of thy precursors ; yet to thee
Belong the charms of solemn majesty
And naked grandeur. Awful is the tone
Of thy tempestuous nights, when clouds are blown
By hurrying winds across the troubled sky ;
Pensive, when softer breezes faintly sigh
Through leafless boughs, with ivy overgrown.
Thou hast thy decorations too ; although
Thou art austere ; thy studded mantle, gay
With icy brilliants, which as proudly glow
As erst Golconda's ; and thy pure array
Of regal ermine, when the drifted snow
Envelopes Nature ; till her features seem
Like pale, but lovely ones, seen when we dream.

B. BARTON.

THIS beautiful description of winter, from the pen of a living poet of deserved celebrity, is rather a picture of this season as it *was*, than as it *is*, or *has* been for several years past in this country. Such was the extraordinary mildness of the last winter, that the following flowers were seen in full blossom in January, and looked nearly as vigorous as in the summer months:—Carnations, roses, chrysanthemums, auriculas, ten week stocks, mignonette, marigolds, sweet peas, polyanthus, primroses, and violets. So that the tenure by which an estate in Yorkshire is said to be held, of presenting to the landlord ‘a red rose at Christmas, and a ball of snow at Midsummer,’ is not now so difficult as it probably appeared when first instituted. The botanic gardens also afforded the novel spectacle of many exotics blowing in the open air, which, at this season, seldom or ever emerge from the comfortable security of the hot-house. The warm and open weather, however, was accompanied by almost continual rain; and the inconveniences usually experienced from the breaking up of a long and hard frost were severely felt in many parts of the country, and in the neighbourhood of London.

The subsequent *frost* enabled the confectioners to lay in some *ice*, that they might freeze their creams in winter; but as this supply was by no means sufficient for the London market, a speculating *patissier* sent to Norway for two ship-loads of clear ice, to be cut out of some of the extensive lakes in this country. The first cargo arrived safely and opportunely, as the weather was cold, though in May, and the commodity was quickly distributed to the different confectioners in London. It was sold at three halfpence a pound, and afterwards retailed at fourpence halfpenny. The speculator, we are assured from unquestionable authority, gained *four thousand pounds* by the venture! The second ship, however, did not arrive soon enough, and much of the ice was lost in consequence of the heat

of the weather. About six years ago a similar speculation was made in this *slippery* commodity.— When the cargo arrived in the river, the Custom-house officers were, as usual, on the alert, and the iceberg from which it had been abstracted, not having either a custom-house or an accompting-house erected on it, the customary bills of lading and clearance were wanting. This was not the only informality discovered in the case. The commodity being foreign, it was clear that it should be entered at the Custom-house of London; but whether under the head of *produce* or of *manufacture*, was a very puzzling question. After much dispute, it was proposed to cut the knot, by entering the commodity as *foreign fabric*; and not being enumerated in the custom-house list, it was consigned to pay a duty *ad valorem*, or, according to the value. This is 25 per cent., and the importer has the option of estimating the value. A compromise was, however, effected in time to prevent a premature dissolution; and the remnants of the precarious commodity were, in haste, distributed among the ice-houses in town.

As *frost and snow* may be still *within the recollection* of our readers, and perhaps, ere these pages shall issue from the press, may again present their curious and beautiful *phenomena* to the eye of the inquisitive observer, we shall, in continuation of our former notices on the subject¹, proceed to offer some remarks on the various interesting appearances which are exhibited by the progeny of winter in the frozen regions of the North.

The beautiful appearances occasioned by the Sun shining in a cold of twenty or thirty degrees of Reaumur, are scarcely to be conceived by those who live in more temperate countries. Ten thousand spark-

¹ See the *Naturalist's Diary* for January and February in our previous volumes, and particularly the *last*, pp. 27, 52, 82, for an interesting account of the 'Phenomena and Natural History of the Arctic Regions.'

ling stars of ice, brighter than the brightest diamond, play on the surface of the frozen snow; and the slightest breeze sets in motion myriads of icy atoms whose gleaming light and beautiful rainbow hues dazzle and weary the eye. A recent traveller in Russia, while describing the intense cold of the winter in that country, thus mentions the hardihood and indifference with which it is borne by the natives. While the shivering foreigner, buried in some six or seven fur mantles, hastily leaps into the carriage as if fearful of a moment's exposure to the air, and there fences himself round with cushions and curtains; the active driver, attired in his short pelisse, and with his neck bared to the inclemency of the weather, leaps on his seat with an agility equal to that of a French opera dancer; and immediately commences both his journey, and his clear, animated song. The keen winds cut his face, icicles hang upon his hair, his rugged beard is congealed to a mass of ice, flakes of snow fill both his bosom and his open mouth—no matter, he still continues to sing until he arrives at the next inn: there he hastens to the warm stove; removes the icicles from his visage, crosses himself before the smoked saint placed in one corner of the apartment; swallows his glass of brandy, and is again in his seat, and on his journey.

During the thaw at the breaking up of winter in *Canada*, a very extraordinary effect is produced on some of the trees: where this occurs, the tree, from the trunk to the point of the smallest branch, becomes incrustated with pure ice. There may be a small degree of frost during the night which freezes the moisture that covered the trees during the day; and it is probable that the external parts of the trees themselves (being cooled down below the freezing point by the extreme cold of the previous weather) freeze the vapour the moment it comes in contact with them; in the same way that the glass of a win-

dow, in winter; becomes incrustated with ice by the freezing of the moisture in the air of a room. The branches become, at last, so laden with ice, that it is with difficulty they support its weight; and if there happen to come a storm of wind, the branches infallibly break off, and the destruction among trees, of all sorts, is immense. Branches from six to twelve inches in diameter are seen every where hanging from the trees, completely broken down. Nothing can be more curious and beautiful than one of these ice-incrustated trees, when the Sun shines upon it, having the appearance of fairy work, or enchantment.

In stating facts illustrative of the severity of a Canadian winter, a recent traveller mentions the experiments on bomb-shells, made at Québec some years ago by a Major Williams, of the Artillery, in order to ascertain *the force of freezing water*: these were made on iron shells of different sizes, from the thirteen inch shell to the cohorn of four inches diameter. The shells were nearly filled with water, and an iron plug was driven in at the fuze hole by a sledge hammer. It was found, however, that the plug could never be driven so firmly into the fuze hole as to resist the expanding ice, which pushed it out with great force and velocity, and a bolt or cylinder of ice immediately shot up from the hole; but when a plug was used that had springs, which would expand and lay hold of the inside of the cavity, so that it could not possibly be pushed out, the force of the expansion split the shell.

The amazing force of expansion in congelation is also shown from the distance to which these iron plugs were thrown out of the fuze hole. A plug of two pounds and a half weight was thrown no less than 415 feet from the shell; the fuze axis was at an angle of 45: the thermometer showed 51 degrees below the freezing point. Here it appears that ice and gunpowder perform the same operations.

The month of January in England, if not clad in snow and icicles, is generally borne upon the 'strong tempest's wing,' and speaks in loud and audible tones, 'the woods and fields among;' but two-faced, like Janus, whence he takes his name, he has also his summer garb, his smiling features, and his wreaths of flowers, as the past year abundantly testified.

The numerous tribes of *birds* now quit their retreats in search of food. Larks (*alauda arvensis*) congregate, and fly to the warm stubble for shelter; and the nut-hatch (*sitta europæa*) is heard. The shell-less snail or slug (*limax*) makes its appearance, and commences its depredations on garden plants and green wheat. The missel thrush (*turdus viscivorus*) begins its song. This bird sings between the flying showers, and continues its note till the beginning of August.

The red-breast (*motacilla rubecula*) chaunts its pretty song. This little bird, on account of its near approach to our dwellings and its familiarity with man, is, perhaps, the best known of all the feathered race, except such as are kept in domestication. They are capable of enduring the most severe winters in this island; but, at the approach of such inclement seasons, they leave the woods, where they reside in summer, and are willing to acknowledge a kind of dependence upon man. It is then that they enter the orchards of the farmer, and establish themselves in some hedge, or unoccupied house; making frequent calls at the kitchen-door, during the continuance of frost, in order to pick up any crumbs and fragments that have been dropped there, before they are destroyed or congealed by the frost. Many of them have been fed from the window during the whole season: some entrust themselves even within the room; and it is seldom that they repent of this confidence; for they are universal favourites, and, almost always, meet with that generous treatment which their wants or their trust in the human race so well merit. It is remarkable,

that a bird which remains in North Britain all the year round should migrate from France during the winter months. Such, however, is the case: in France, the red-breast frequents the hedges and dwelling-houses, for a short time, in autumn and spring; but regularly in the dead of winter, when the hard frost commences, disappears. In his spring visit, he makes but a short stay, hasting, as he then is, to enter the forest, that he may there, amidst the spreading leaves, enjoy solitude and love.

The red-breast builds its nest at the foot of some thick shrub, or upon a tuft of grass able to support it. The materials of which it is composed are oak-leaves, moss, and a bed of feathers within. Sometimes, after the edifice is finished, the bird covers it entirely over with leaves, allowing only a small passage to remain, sufficient to admit its body. During the season of nestling and incubation, the male makes the grove resound with his soft and melodious lays. His warbling is soothing and tender, animated occasionally with notes of a louder tone, and sometimes, too, graced with those touching and enagaging accents, that seem to express the ardour of his love. In the sweet society of his female, he seems to be wholly absorbed: at the interference of other company, he becomes fretful and enraged; for no stranger is permitted to intermeddle with his joy: even those of his own species he pursues with rage, till he banishes them from the district he has chosen for himself. His love exhibits a strange mixture of jealousy and attachment.

The food of the red-breast varies with the season. In spring, he feeds upon insects and worms, which he pursues with address and nimbleness, in those moist and shady districts where he then resides. In autumn, he devours all kinds of seeds and fruits that are produced in the district, not excepting the apple and the grape.

There is no bird more active, none satisfied with a smaller portion of rest, than this bird: he is the first that appears in woods at the break of day, and the last that retires thither in the evening to enjoy repose. This species is spread over the whole of Europe, from Norway and Sweden, to the coast of the Mediterranean.

On hearing a ROBIN sing in CHURCH during Divine Service.

While grateful crowds their ready homage pay,
And heav'nly chauntings hail the sacred day—
While the loud organ's note responsive swells,
And the rapt soul in mute attention dwells—
Say, little robin, Winter's sweetest bird!
Shall thy small twitter waft its notes unheard?
Shall the pure offering of thy native song
Unheeded pass the prouder strains among?
Ah, no! lone songstress, humble though thy note,
Though small the tribute of thy warbling throat;
Yet, in His eye, who marks the sparrow's fall,
Who, ever present, reigns the Lord of All;
To Him, the feeblest song, the simplest prayer,
To find an audit, needs but be sincere:
Nor 'midst the skilful tones of human art
Will he o'erlook the incense of the heart;
But ever deign to lend a gracious ear,
Thy hymns and mine, sweet moralist, to hear.

The hedge-sparrow (*motacilla modularis*) and the thrush (*turdus musicus*) now begin to sing. The wren, also, 'pipes her perennial lay,' even among the flakes of snow. The titmouse (*parus*) pulls straw out of the thatch, in search of insects; linnets (*fringilla linota*) congregate; and rooks (*corvus frugilegus*) resort to their nest trees. Pullets begin to lay; young lambs are dropped now. Spiders shoot out their webs; and the blackbird (*turdus merula*) whistles. The fieldfares, red-wings, skylarks, and titlarks, resort to watered meadows for food, and are, in part, supported by the gnats which are on the snow, near the water. The tops of tender turnips and ivy-berries afford food for the graminivo-

rous birds, as the ringdove, &c. Earth-worms lie out on the ground, and the shell-snail (*helix nemoralis*) appears. On the utility of worms in manuring the soil, see T.T. for 1821, p. 27.

The house-sparrow (*fringilla domestica*) chirps. This bird not only builds its nest under the eaves of houses, but in the nests of other birds, and sometimes alone on the top or nearly the top of the Lombardy poplar.

The bat (*vespertilio*) is now seen. Bats are very useful animals; destroying great numbers of the large white moths which fly abroad by night. Our Somersetshire correspondent informs us that he had a colony of bats over the entrance to his house. They generally continued abroad during the darkness of the night in the summer season, and returned to their abode on the approach of day. He was very careful that this colony should not be destroyed or disturbed. By turning down the lead, he could, at any time of the day, see great numbers of them; and he counted, early one morning in the summer, seventeen returning from their night's excursion. These animals appear particularly partial to lead roofs, hence their frequency about churches covered with lead.

In very severe winters, that beautiful bird, the Bohemian chatterer (*ampelis garrulus*), is sometimes found in this country.

The appearance which nature presents in the *vegetable kingdom*, at this season of the year, are scant indeed; yet, amid the general torpor, reviviscent signs appear, enough to invite our readers to enter upon the study of *Botany*, under the auspices of a New Year, which has ever been held favourable to fresh projects, and which are now undertaken with renewed ardour.—See some remarks in our last volume, pp. 21-23, 170-181.

The *hellaborus niger*, or Christmas rose, as it is

commonly called, exhibits its pretty flowers at this season. If the weather be very mild and favourable, the garden crocus (*c. vernus*) puts forth its flower before the leaves are grown to their full length. As an agreeable contrast to this golden-coloured flower, the snowdrop (*galanthus nivalis*), formerly called 'fair maids of February,' from its generally appearing in that month, often graces the last days of this. It is a modest and elegantly drooping flower.

The china rose (*rosa chinensis* and *rosa semper-florens*), till lately unknown to us, and at first considered only as a greenhouse plant, is now seen in blow in the open air, even in the month of December, often with its red buds mossed with frost.

In mild seasons there are many flowers in blow in the month of January; some we have enumerated in p. 24: to these may be added periwinkle (*vinca, major & minor*), heart's ease (*viola tricolor*)*, and the delightful, sweet-smelling wall-flower (*cheiranthus cheiri*), to which we have a just tribute in this exquisite sonnet:—

* HEART'S EASE: by W. Maxwell, an American Poet.

There is a charming little flow'r,
A charming flow'r it is;
The brightest gem in Flora's bow'r,
And sweet as Beauty's kiss.

There is no fragrance in its sigh,
To tempt the busy Bee;
It doesn't please the Butterfly,
But it is dear to me.

I love to see the little thing,
When Morning paints the skies,
Before the lark is on the wing,
Open its sparkling eyes.

Then, bright and fresh with shining dew,
It glitters to the ray,
With triple spots of various hue,
So fancifully gay.

This is the flow'r that I will wear,
That girls may cease to tease;
Its name is music to my ear,
What is it called?—Heart's Ease.

To the WALL-FLOWER.

I will not praise the often-flattered rose,
 Or, virgin-like, with blushing charms half seen,
 Or when in dazzling splendour, like a queen,
 All her magnificence of state she shows;
 No, nor that nun-like lily, which but blows
 Beneath the valley's cool and shady screen;
 Nor yet the sun-flower, that with warrior mien
 Still eyes the orb of glory where it flows;—
 But thou, neglected *wall-flower*, to my breast
 And muse art dearest, wildest, sweetest flower,
 To whom alone the privilege is given
 Proudly to root thyself above the rest
 As genius does, and, from thy rocky tower,
 Lend fragrance to the purest breath of heaven¹.

Bees venture out of their hives every month in the year, and may occasionally be seen on some fine mild days in January, busily improving 'each shining hour' in gathering food from the snowdrops, &c.

The golden saxifrage, called also golden *moss*, and stonecrop (*chrysosplenium*), in the absence of other flowers, affords its little aid to give life and beauty to the garden. The bramble (*rubus fruticosus*) still retains its leaves, and gives a thin scattering of green in the otherwise leafless hedges; while the berries of the hawthorn, the wild rose, and the spindle-tree, afford their brilliant touches of red. The twigs of the red dog-wood, too, give a richness amid the general brown of the other shrubs. *Ivy* now casts its leaves.

The MINSTREL of the IVY TREE.

My garden-wall was old and bare,
 I sought an oak with ivy crowned;
 It had a straggling branch to spare;
 I bore it to my garden ground.
 Six summer suns their beams have shed,
 And smiled upon my stolen guest:
 The ivy to the wall is wed,
 The *Robin* there has built his nest.

¹ Sixty-five Sonnets, &c., Baldwin and Co., 1818.

When clad with snow each leafless tree,
 And ev'ry other songster's fled,
 Sweet is the red-breast's minstrelsy,
 Soft carolled from his ivy bed.
 And much I love my tuneful guest,
 I love to hear his early song ;
 I love the bird with crimson breast,
 And wish he may his stay prolong.
 The wind which felled the antient oak
 That gave the ivy for his nest,
 And the tall mountain pine hath broke,
 Harmed not the bird with crimson breast.
 His humble home is ever green,
 Its happy inmate ever gay ;
 His wild notes glad the sylvan scene,
 They charm the win'try hours away.
 Sweet bird! I'll court thy longest stay,
 For thee the gay green moss I'll spread,
 With tribute to thy minstrelsy
 Some scattered crumbs of hoarded bread.
 If ever I forget my guest,
 I'll give thee leave afar to fly ;
 And quit thy ivy-sheltered nest,
 To live beneath some friendlier eye.

Mr.

In this month, the farmer carries out manure to his fields, and repairs quickset hedges; taking advantage of the dry and hard ground, during frost. The barn resounds with the flail, barley being now threshed for malting. He lops forest trees, and cuts timber for winter use. About the end of the month, in dry weather, peas and beans are sown, and vetches for seed or fodder. Hogs are killed for bacon, and beef and hams are smoked.

Great inconvenience is sometimes experienced in winter from the freezing of ponds. These are often frozen over with thick ice, and it is necessary to break a place in this, and throw out the ice, for the cattle to get at the water: the fresh ice too must be broken, and thrown out; and so on, till almost all the water is converted into solid rock. To remedy this, our Huntingdonshire correspondent suggests the following idea of

A FROST WELL.

A pond might be kept open, and a sort of well formed, by sinking a tub or barrel, without a bottom, or a square frame-work of rough wood, into a hole broken in the ice, so as to rise some inches above the water; and to put round this some dry sweet litter, very close; and over the top a wooden cover, or lid, like a lid to a copper, which may be taken off at such stated times as are proper for the cattle to drink, and then put on again, and covered with litter. This would, probably, keep even very severe frost from freezing the water within, and only require the trouble of removing the litter and cover each time, instead of the very great labour of breaking the ice with a club, or pick-ax, or mattock. Fresh horse-litter from the stable would answer the purpose of keeping the water from freezing better than the plain straw; but, as this would hurt the pond, if suffered to drain into it, or if not taken away as soon as the thaw commences, straw may be safer for use in general cases. Some rough boards, with some litter over them, should be laid on the ice, from the edge of the pond to the well, for the cattle to tread on, to prevent either their slipping, or breaking in the ice; and it would be still better to have rails on each side of this way to the well, to prevent the cattle going on the naked ice.

The timely covering up of wells, pipes, and pumps, and drawing off the water from tubs, to prevent their bursting at the approach of frost, are most important points to be attended to.

FEBRUARY.

SOME etymologists derive February from *Februa*, an epithet given to Juno, as the Goddess of Purification; while others attribute the origin of the name to

Februa, a feast held by the Romans in this month, in behalf of the manes of the deceased.

Remarkable Days

In FEBRUARY 1823,

*1. 1811.—VOLCANO IN THE SEA,

ON this day a tremendous volume of smoke was seen to issue and rise from the sea (near the Azores), though apparently thick and dense, to an extraordinary height above the first region of the atmosphere. At intervals, a dark muddy substance was driven up to ten, and sometimes to twenty, fathoms. No flame was visible during the day: it was at night that the phenomenon filled the mind with the most terrific and sublime sensations; it was at night that the awful contest between two of the grand elements of nature struck the senses with the most unmingled wonder and admiration. The flame did not always ascend very high, perhaps not more than twenty feet above the surface of the sea; but at times of remoter intervals, the fire accompanied the smoke to a prodigious height, carrying up with it substances resembling pieces of stone or metal. An explosion on the fifth day was far more tremendous than any former one. The fire ascended like a host of sky-rockets to an immense height, and the burning fluid, or lava, was not extinguished till it plunged again into the ocean. The distance from the shore is about a mile and a half; and when the eruption had, in some degree, subsided, the spot appeared like a rock under water, with the sea breaking furiously over it.

2.—PURIFICATION OF THE BLESSED VIRGIN MARY.

This festival is of high antiquity, and the antient christians observed it by using a great number of lights; in remembrance, as it is supposed, of our

blessed Saviour's being declared by *Simeon* to be a light to lighten the Gentiles ; hence the name of Candlemas-day. The *Benediction of the Candles* at Rome on this day is described in our last volume, p. 34.

3.—SEXAGESIMA SUNDAY. See SEPTUAGESIMA SUNDAY, p. 15.

3.—SAINT BLASE.

He was Bishop of Sebaste in Armenia, and suffered martyrdom in 316, under the persecution of Licinius, by command of Agricolaus, governor of Cappadocia and the Lesser Armenia.

5.—SAINT AGATHA.

She suffered martyrdom under Decius, in the year 251. In the third part of the homily against peril of idolatry it is said, 'Ænomaus and Hesiodus show, that, in their time, there were thirty thousand gods. I think we had no fewer saints, to whom we gave the honour due to God. And they have not only spoiled the true living God of his due honour in temples, cities, countries, and lands, by such devices and inventions, as the Gentile idolaters have done before them, but the sea and waters have, as well, special saints with them, as they had gods with the Gentiles, Neptune, Triton, Nereus, Castor and Pollux, Venus, and such other; in whose places be come in St. Christopher, St. Clement, and diverse others, and specially our Lady, to whom shipmen sing *Ave; maris stella*. Neither hath the fire escaped their idolatrous inventions; for, instead of Vulcan and Vesta, the Gentiles' gods of the fire, our men have placed *St. Agatha*, and make letters on her day for to quench fire with.'

The fête of this saint is celebrated with great pomp at Catania, in Sicily. The following account is given by a traveller who witnessed it in 1819. The image of the saint, of the natural size, is carried on the shoulders of four priests to the church: this object of the adoration of the people was deco-

rated with diamonds and all kinds of precious stones, and reclined on a massive plate of silver; it was covered with a veil. Cries of 'Long live St. Agatha' resounded through the church, which was splendidly illuminated. The soldiers, ranged in two lines, could scarcely make a passage for it: every one was in motion, and was continually leaping before the statue, exclaiming, 'Oh, how handsome she is! Oh, how good,' &c. From the church the image was conveyed to an enormous car, drawn by twenty pair of oxen, and thus paraded round the city amid peals of applause from the infatuated multitude. The fête was terminated by a display of fire-works and a general illumination.

9.—QUINQUAGESIMA SUNDAY. See SEPTUAGESIMA, p. 15.

*9. 1555.—DR. ROWLAND TAYLOR MARTYRED.

He was Rector of Hadleigh in Suffolk, and was burnt alive in the sanguinary persecution under Queen Mary, for his adherence to the doctrines of the reformation. The following is the inscription on a monument erected on Oldham Common to commemorate his martyrdom:—

Mark this rude stone, where TAYLOR dauntless stood,
Where zeal infuriate drank the martyr's blood!
Hadleigh! that day how many a tearful eye
Saw thy loved pastor dragged a victim by:
Still scatt'ring gifts and blessings as he past,
'To the blind pair' his farewell alms were cast;
His clinging flock e'en here around him prayed,
'As thou hast aided us, be God thine aid.'
Nor taunts, nor bribe of mitred rank, nor stake,
Nor blows, nor flames, his heart of firmness shake;
Serene, his folded hands, his upward eyes,
Like holy Stephen's, seek the op'ning skies:
There, fixed in rapture, his prophetic sight
Views Truth dawn clear on England's bigot night.
Triumphant saint! he bowed, and kissed the rod,
And soared on seraph wing to meet his God!

The following words are engraved in rude capitals upon the unhewn stone at the foot of the monument:

D. TAYLER IN DE
FENDING THAT
WAS GOOD AT
THIS PLAS LEFT
HIS BLODE.

11.—SHROVE TUESDAY.

Shrove Tuesday (observes a lively writer) is a relic of the carnival, and is more properly called, in some parts of the country, Pancake Tuesday, the shriving or confession of sin taking place in the Shrovetide or Lent, which follows it. It was the interval between flesh-eating and fish-eating, and so they judiciously filled up the time with pudding. The making of the pancakes used to furnish as much amusement in the kitchen as their mastication did in the parlour, the operators piquing themselves on tossing them skilfully in the pan. But the custom is too much gone out. We see a great many reasons for the discontinuance of some customs,—of cock-fighting, for instance, which used to be the disgrace of this day, and which is the pastime of cowards. But why we should give up our pancakes, unless we have lost our gums as well as teeth, or are subject to the heart-burn, we see no reason upon table. They are of taste 'not inelegant,' as Milton says; they are a nice variety; their entrance is a prodigious moment for the children; they can accommodate themselves to sophisticated palates by means of lemon-juice or vinegar: the rolling of one of them up, and then cutting it with a knife and fork, and dipping the slice into plenty of sugar, is a thing not to be lightly praised. All such customs and puddings, even black ones, for which we have an esteem, are innocent links with, and memorials of, our ancestors.—(*Literary Pocket Book*, 1822.)

Our *Huntingdonshire correspondent* has sent us an account of a practice in his neighbourhood, called *cock-running*, which, though not quite so cruel as *cock-throwing*, is not much inferior to it. A cock is procured, and his wings are cut; the *runners* pay so

much a-head, and have their hands tied behind them, and run after him, and are to catch him in their mouths, hold him, and carry him to a certain place or goal, when the bird is his. In this *race* there is much tumbling and squabbling for the bird, and the one who gets hold of it frequently has his face and eyes very much pecked. On an attempt to have one of these runnings in our correspondent's parish on Shrove Tuesday, 1822, the owner of the cock, who had given two shillings for it, could not get runners sufficient, at three pence a-head, to make it answer to him; and our correspondent attributes this to his having put up in the school-house, in a large print, the following lines, which had been given him by a friend, and which had been got by heart by all the children for several years :

ON CRUELTY to BRUTES.

A man of kindness to his beast is kind,
But brutal actions show a brutal mind :
Remember, He who made *thee*, made the brute ;
Who gave *thee* speech and reason, formed him mute :
He can't complain, but God's all-seeing eye
Beholds thy cruelty—He hears his cry.
He was designed thy servant, not thy drudge ;
And know,—that his Creator is thy Judge !

P.

12.—ASH WEDNESDAY.

Formerly Lent began on the Sunday after *Quinquagesima*, i. e. our first Sunday in Lent, and ended at Easter, containing in all 42 days; and subtracting the six Sundays which are not fasts, there remained only 36 fasting days, the tenth part of 360, the number of days in the antient year, then considered as a tythe of the year consecrated to God's service. To these 36 fasting-days, however, of the *Old-Lent*, Gregory added four days more, to render it equal to the time of our Saviour's fasting, causing it to begin on *Ash Wednesday*, three days after *Quinquagesima*; and thus it has remained ever since. Lent is not of apostolic institution, nor was it known in the earlier ages of the Christian church.

14.—SAINT VALENTINE.

By a most singular arrangement, the day on which a christian bishop suffered martyrdom 1500 years ago, has been for a long course of time commemorated by the effusions of earthly love and fancy. Not one of the saints' days in our calendar, we may safely say, has been so honoured by the Muses. Little dreamed the Emperor Valerianus, when he gave the order which doomed this persecuted individual to the block, that he was bestowing a name upon a day to be held in pleasant memory by youthful swains and blushing damsels—a day in which the spirit of martyrdom has little place, unless indeed the Muse may be doomed to act the part of the deceased saint, which, we believe, is pretty often the case.

From an ingenious essay on *Valentine-Writing*, in the *New Monthly Magazine* (vol. iv, N.S. p. 228), we select the following pretty specimens of Valentines. The first is, we suppose, by a young lady *only just sixteen* :—

It is the hour of morning's prime,
The young day of the year,
The day of days before the time
When brighter hopes appear.
It is the time of early love
When suns but faintly shine ;
It is the day, all days above,
The sweet St. Valentine!

The cold snows on the meadows lie,
And not a leaf is green,
Yet here and there in yonder sky
A gleam of light is seen.
So Love, young Love, 'mid storms and snow
Darts forth a light divine ;
So darker days the brightness show
Of thine, St. Valentine!

The next is from a poor melancholy witling, who really *loved love*, because it added to his stock of romantic musings. If his lady *had* smiled upon him, it would infallibly have broken the charm, and his

heart also. But from this catastrophe he was happily delivered. He has not unaptly portrayed his feelings in these lines, and therefore we select them from among a dozen more appropriate to the occasion.

Poor Primrose ! that through covering snow
Peep'st forth the morn to greet,
Why fairer than the Rose art thou?
Than summer flowers more sweet?
Why, ask'st thou? Doth not Nature still
In man thus wayward prove?
Must she not charge the cup with ill,
Ere aught he finds to love?

And has not Love, by fortune's blast,
By storms, by perils tried,
And more than conqueror proved,—at last
'Mid smiles and sunshine died?
Yes! thou that liv'st on Hope, believe
That Hope is man's true bliss;
No brighter joy hath Heaven to give,
No fairer flower than this.

It is said that the sweet air of 'Rousseau's Dream,' to which all our poets, now-a-days, have a song, was first imported into this country twenty-two years ago, and that the first English words ever written to it were in the form of a serenade from a lover to his betrothed on the morning of Valentine's-day. If this be true, our readers will, no doubt, thank us for laying before them a copy of these lines.

Health to thee, mine own sweet lady!
Health and blessing, first and last!
Now may Heaven, all bounteous, aid me,
Round thy path new spells to cast.
Blessed be thine early morning!
Blessed be thine evening close!
Blessed thy going and returning,
Summer hours, and winter snows.

Not to thee, all undeceiving,
Pure of spirit, frank of heart,
Shall the Muse, her fictions weaving,
Act the faithless flatterer's part.

Win and wear thy prize, sweet lady!
 Faith as true, as pure as thine;
 Love and service ever ready
 From thy well-known Valentine.

19, 21, 22.—EMBER DAYS.

There are *four* Ember Weeks in the year, namely, after the first Sunday in Lent, after the feast of Pentecost, after the 14th of September, and after the 13th of December. It is enjoined by a canon of the church, 'that Deacons and Ministers be ordained, or made, but only on the Sundays immediately following these Ember feasts.'—(Nelson.)

24.—SAINT MATTHIAS.

Matthias was, probably, one of the seventy disciples, and was a constant attendant upon our Lord, from the time of his baptism by St. John until his ascension. The gospel and traditions published under his name are considered spurious.

Astronomical Occurrences

IN FEBRUARY 1823.

SOLAR PHENOMENA.

THE Sun enters Pisces at 33 m. after 9 in the morning of the 19th of this month. He will also be eclipsed in the morning of the 11th; but as he will not have risen to this country at the time, the eclipse will, of course, be *invisible* here. The circumstances are,

Conjunction at . . 3 h. 4 m. 30 s.
 In longitude . . . 10 s. 21° 39'
 Moon's latitude . . 0 1 20½ N.

This bright luminary also rises and sets on several days in this month, as in the following

TABLE

Of the Sun's Rising and Setting for every fifth Day.

February 1st, Sun rises 28 m. after 7.	Sets 32 m. after 4
6th, 19	7 41 4
11th, 10	7 50 4
16th, 1	7 59 4
21st, 51	6 9 5
26th, 41	6 19 5

Equation of Time.

Apparent time, or that which is shown by a good sun-dial, requires the following numbers to be added to it to give that which ought to be indicated by a well-regulated clock at the same instant:—

TABLE

Of the Equation of Time for every fifth Day.

		m.	s.
Saturday, Feb. 1st, to the time by the dial add		13	53
Thursday, 6th,		14	24
Tuesday, 11th,		14	35
Sunday, 16th,		14	27
Friday, 21st,		14	0
Wednesday, .. 26th,		13	16

LUNAR PHENOMENA.

Phases of the Moon.

Last Quarter, 2d day, at 34 m. after 10 at night		
New Moon, 11th 5	3	in the morn.
First Quarter, 18th 2	1	.....
Full Moon, 25th 6	5	.....

Moon's Passage over the Meridian.

The Moon will make her transit over the first meridian of this country at the following times during this month, which will afford good opportunities for observation, should the weather be favourable: viz.

February 2d, at 1 m. past	5	in the morning
3d, .. 47	5	.....
4th, .. 36	6	.....
5th, .. 25	7	.....
6th, .. 16	8	.....
7th, .. 6	9	.....
16th, .. 3	4	in the afternoon
17th, .. 57	4	.....
18th, .. 55	5	.....
19th, .. 56	6	in the evening
20th, .. 59	7	.....
21st, .. 0	9	.....
22d, .. 59	9	.....
23d, .. 54	10	.....

PHENOMENA PLANETARUM.

Phases of Venus.

The phases of this beautiful planet will bear the following proportions to each other at the commencement of this month: viz.

February 1st, { Illuminated part = 11·84896 digits
Dark part = 0·15104

Eclipses of Jupiter's Satellites.

The following are such of the eclipses of the first and second satellites of this planet as will be visible at the Royal Observatory this month: viz.

Emersions.

First Satellite,	1st day, at 36 m. 36 s. after	1 in the morning
	2d 5 ... 28	8 in the evening
•	9th 1 ... 15	10 at night
	16th 57 ... 4	11
	18th 26 ... 5	6 in the evening
	25th 21 ... 56	8
Second Satellite,	6th 0 ... 28	0 midnight.
	24th 31 ... 13	6 in the evening.

Immersion.

14th	1	43	0 in the morning.
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TABLE *Of the Transits and Meridional Altitudes of the Planets.*

	1st	7th	13th	19th	25th
	TRANSITS.				
	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
Mercury	1 10 <i>aft.</i>	1 4	0 36	11 34 <i>mor.</i>	11 3
Venus	0 40 <i>aft.</i>	0 45	0 49	0 54	0 59
Mars	6 46 <i>aft.</i>	6 40	6 35	6 29	6 24
Jupiter	6 40 <i>aft.</i>	6 17	5 55	5 34	5 13
Saturn	5 12 <i>aft.</i>	4 49	4 27	4 5	3 44
G. Sidus	9 44 <i>even.</i>	9 21	8 58	8 37	8 15
	MERIDIONAL ALTITUDES.				
Mercury	26° 55'	30° 18'	31° 40'	30° 24'	27° 54'
Venus	22 44	25 14	27 57	30 50	30 50
Mars	23 41	25 19	27 1	30 47	30 36
Jupiter	57 13	57 18	57 25	57 33	57 43
Saturn	49 7	49 15	49 24	49 34	49 43
G. Sidus	15 3	15 4	15 5	15 6	15 7

Other Phenomena.

Venus and Mars. may be seen together on the 4th of this month, when Venus will only be $24\frac{3}{4}'$ south of Mars. The Moon will also be in conjunction with ♈ in Scorpio at 29 m. after 10 the same evening. Mercury will be stationary on the 10th, and in con-

junction with the Moon at 27 minutes past 5 in the morning of the 12th : this planet will likewise attain his greatest elongation on the 4th, and his inferior conjunction at half past 7 in the morning of the 19th. Jupiter will also be in quadrature at 45 m. after 2 in the morning of the 16th.

While the youthful astronomer is contemplating the celestial phenomena of the month, let him reflect that, in reference to the Power who called these mighty orbs into existence, and gave them laws by which these very phenomena are produced, it may truly be said, "these are but part of his ways;" and thus reflecting, may he realize the conception of the poet:

Night opes the *noblest* scenes, and sheds an awe
Which gives those venerable scenes full weight,
And deep reception in the entended heart.

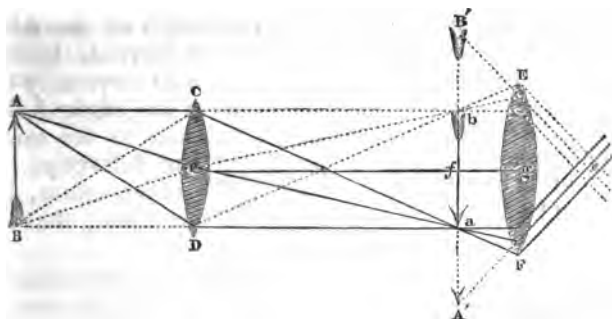
DESCRIPTION AND USE OF SOME OF THE MOST INDISPENSABLE ASTRONOMICAL INSTRUMENTS

To assist our astronomical students in their application of the principles we have already explained, and in observing the phenomena already described, we shall now explain the *nature* and *use* of a few of the most indispensable astronomical instruments. In doing this, however, we shall not enter into the scientific principles of their construction, but merely present such observations as may elucidate their practical purposes. The first that deserves attention is

THE ASTRONOMICAL TELESCOPE.

An astronomical telescope consists of two convex lenses, placed in a tube at a distance from each other equal to the *sum* of their focal distances. That lens which is nearest the object is called the object-glass, and that nearest the eye, the eye-glass. Remote objects appear, through a telescope of this kind, distinct and inverted; and the apparent diameter of an object seen through this telescope is to

its diameter, when viewed by the naked eye, as the focal length of the object glass is to that of the eye glass. The following figure will illustrate these properties. If CD be one convex lens, whose focal distance is cf , and EF another, whose focal distance is gf , and if these be so placed that the distance between them is equal to $cf + gf$, they form an astronomical telescope.



Let AB be the object emitting the several pencils of rays, ACD , BCD , &c. which is supposed to be at so great a distance from the object-glass CD , that the rays of the same pencil may be considered as parallel to each other, the breadth of that glass being nothing in comparison to the distance of the object. These rays are therefore supposed to be collected into their respective foci in the points a and b , situated at the focal distance of the object-glass, CD . Here they form the image ab of the primary object, and, crossing each other, proceed diverging to the eye-glass EF ; which being placed at its own focal distance from the points a and b , the rays of each pencil, after passing through that lens, will be nearly parallel to each other. The pencils, however, will have a great convergency, and will intersect each other at e , very little further from the lens EF than its focal distance gf ; for, in a long telescope, the di-

ameter of the eye-glass bears but a small proportion to the distance between the lenses. So that the place of the eye, to obtain distinct vision, will be nearly in the focus of the eye-glass, and the rays of each pencil being nearly parallel among themselves, and their axes crossing each other in a larger angle than they would have done if the object had been seen with the naked eye, the vision will be distinct, and the object magnified. As, in comparison with the distance of any celestial object, the length of the telescope may safely be neglected, the increase in the apparent magnitude of the object will obviously be in proportion of the angle $A'eB'$ to the angle AcB , or to its equal acb ; or, which amounts to the same thing, the magnifying power of the telescope is equal to the focal distance of the object-glass, divided by the focal distance of the eye-glass; that is,

$$\text{Mag. power} = \frac{cf}{gf}$$

By this, it is simply to be understood that the angle under which the object is seen by means of the telescope is equal to that under which it would appear if brought so many times nearer, as is indicated by the above fraction.

As the axes of the pencils of rays that flow from the object AB cross each other in the axis of the object-glass c , the image, as seen at $A'B'$, will necessarily be inverted. The apparent motion of the object will also be reversed; so that, if it be from left to right in the heavens, it will be from right to left in the telescope. But as this inversion of appearance and motion pertains to all the bodies that fall within the field of the telescope, it is not productive of any practical inconvenience. It will, therefore, be sufficient to have pointed it out, that the young observer may not lose time in searching for the cause of a phenomenon apparently so contradictory to his previous conceptions. It may be

remarked here, that, in viewing objects with a telescope of this kind, it is not the object itself, but its image $A'fB'$, that is seen.

Having thus briefly explained the chief properties of the astronomical telescope, we shall, under the head of next month, offer a few remarks relative to the apparatus attached to it for the purpose of rendering the observations more complete and accurate than they could be made with the instrument in the simple state in which it has been described.

[To be continued.]

The Naturalist's Diary

For FEBRUARY 1823.

The sounding way
Is hard and hoar; crystalline dew congealed
Hath tipt the spiry grass; the waters, bound
In sluggish ice, transparency have lost;
No flock is bleating on the rigid lawn;
No rural pipe attunes th' inclement air;
No youths and damsels trip the choral sound
Beneath bare oaks, whose frost-incrusted boughs
• Drop chilling shadows; icicles invest
The banks of rills, which, grating harsh in strife
With winter's fetters, to their dreary sides
No passenger invite.

GLOVER.

THIS is an exact and beautiful description of the month of FEBRUARY, as it was in the time of the poet; and, although only a vivid picture of 'auld lang syne,' we do not despair of again seeing an original *English winter* with which it may be compared. But even this, with all its severity, cannot be thought of for a moment, when we direct our view to our adventurous countrymen, who now experience all the rigours of a *second ARCTIC WINTER*, and whose safe return to Albion must be the ardent wish and earnest prayer of every Englishman!

Wild scenes of WINTER! what can you disclose
To feast the sight, or give the eye repose?

E

Can frozen grandeur, snows, or solid floods,
 Compete with Britain's fields or waving woods?
 Stern awe and horror ye may well inspire,
 But not one pleasing thought, one fond desire.
 No warbling bird attunes the evening lay,
 If o'er yon rugged hills we chance to stray;
 No distant light proclaims the social dome,
 No loved relations wait us at our home;
 While exiled from society we roam
 Where tempests roar and sparkling surges foam.

N. Georgia Gazette.

In this and the following month *tom-tits* are seen hanging on the eaves of barns and thatched out-houses, particularly if the weather be snowy and severe. It is difficult to comprehend by what means many of our small and insectivorous birds are preserved during some of our hard and long winters, unless they have powers of abstinence greater than we are sensible of. The little blue tom-tit (*parus cæruleus*) more frequently perishes in severe winters than any bird that we are acquainted with: they lay many eggs, and numbers are thus produced to supply the annual waste: he will pick a bone in our yards with great adroitness, or scraps of meat at the butcher's stall, but this seems rather the result of necessity than of choice; for when other food becomes attainable, he still may procure meat. The chief sustenance of the tom-tit is *insects*, which he will hunt out with indefatigable perseverance, and draw from their asylums by many stratagems: he peeps into the nail-holes of our walls for the spider and the chrysalis of the cabbage butterfly; yet a supply of such food is very precarious, and always, in the winter season, of difficult attainment; consequently a great mortality ensues. This bird roosts under the eaves and in the little holes of our hay-stacks, where we often find him dead, killed by hunger or cold, or both conjointly:

In chinks and holes
 Ten thousand seek an unmolested end,
 As instinct prompts, self-buried ere they die.

And this poor little animal, besides, has the misfortune, with many others equally inoffensive, to be included in the catalogue of injurious birds, rewards being given for its destruction. We have seen, in the churchwardens' charges for a very small parish, '*money paid for seventeen dozen of tom-tits' heads,*' in one year.

In the course of this month all nature begins, as it were, to prepare for its revivification; and animate and inanimate nature seem to vie with each other in opening the way to spring. About the 4th or 5th, the woodlark (*alauda arborea*), one of our earliest and sweetest songsters, renews his note; the thrush sings, and the yellow-hammer is heard; the chaffinch sings, and the redbreast continues to warble.

The ROBIN.

'Twas winter, and the icy scene
Gleamed with the rosy tint of morn;
Dead was the verdure of the green,
And leafless was the spangled thorn;

When at my window-sill appeared
A little minstrel, blithe and gay,
Who with his woodland music cheered
The morn, and stole the time away.

Upon his downy breast he wore
A brilliant badge of crimson hue,
And lingered round my cottage door,
As loath to bid the cat adieu.

A welcome visitor was he,
For him my window-sill was spread,
With tributes to his minstrelsy,
Some scattered crumbs of hoarded bread:

And much I loved my little guest,
I loved to hear his early song;
I loved the bird with crimson breast,
And wished he might his stay prolong.

But winter came with sternest frown,
And, lo! upon a luckless morn,
I saw the bird with breast of down
Lie dead beneath the spangled thorn.

Now 'neath the moss of yonder mound,
All tuneless, lies my once-loved guest,
And lightly bears the grassy ground
Upon the bird of crimson breast.

E.

Rooks (*corvus frugilegus*) now revisit their breeding-trees and arrange the stations of their future nests; an important business, attended with great bickering and contention, the warfare of the rookery continuing till the females are settled on their eggs. The regularity observed by these creatures in their returns from the morning excursion is admirable; and they who have an opportunity of attending to them will find it regulated, in regard to time, with great precision, though they often feed at many miles distant from their roost. In calm evenings they return in large bodies, high in the air, with a steady, quiet motion; at other times they scud away near the earth in small parties, on rapid wing, influenced probably by the state of the atmosphere, though it does not appear to indicate any certain condition or change. The *daw* (a bird probably on the increase) mingles with them, and, thus united, they constitute a large body. But the rook itself has probably of late years decreased in numbers: their haunts have been disturbed by the changes in our manners and ideas; our 'old-fashioned halls' are modernized; perhaps the 'dull aunts' do not now exist,—and the habitations of the 'croaking rooks' are cut down at a hint from the timber-merchant. In some counties very few rookeries remain, where they once regularly pointed out the farm, the grange, or the court-house.

Turkey-cocks now strut and gobble. Partridges (*tetrao perdix*) begin to pair; the house-pigeon has young; field-cricketts open their holes; and wood-owls hoot: gnats play about, and insects swarm under sunny hedges; the stone-curlew (*otis ædicnemus*) clamours; and frogs (*rana temporaria*) croak. By the end of February, the raven (*corvus corax*) has generally laid its eggs, and begun to sit. Moles

(*talpa europæus*) commence their subterraneous operations.—See T.T. for 1814, p. 49, and T.T. for 1818, p. 43.

About this time the green-woodpecker (*picus viridis*) is heard in the woods, making a loud noise.

Bullfinches return to our gardens in February, and, though timid half the year, are now fearless and persevering. On the mischief effected by these birds at this season, see T.T. for 1821, p. 50.

But few *flowers* appear in this month: the dwarf-bay (*daphne mezereon*) puts forth its highly fragrant pale lilac flowers in profusion, often entirely concealing the branches: an occasional variety is found with white flowers. The mezereon is most readily and easily propagated by merely covering the red berries, as they fall off under the plant, with earth. The laurustinus (*viburnum tinus*) is in flower, and the great henbit (*lamium amplexicaule*) graces the sunny bank with its purple blossom; while the mulberry-coloured catkins of the alder (*betula alnus*) give an air of cheerfulness to the otherwise bare and desolate scene. Such was the extraordinary mildness of the last winter (1822), that the *crocus* was in blossom on the 2d, and the *snowdrop* on the 3d of February; the *anemone hepatica* on the 18th.

On observing a BLOSSOM on the 1st of February, 1796.

Sweet flower! that peeping from thy russet stem
Unfoldest timidly (for in strange sort
This dark, frieze-coated, hoarse, teeth-chattering month
Hath borrowed Zephyr's voice, and gazed upon thee
With blue voluptuous eye), alas, poor flower!
These are but flatteries of the faithless year.
Perchance, escaped its unknown polar cave,
Ev'n now the keen north-east is on its way.

COLERIDGE.

The principal objects worthy of attention in the vegetable kingdom, in the present month, are the various species of *mosses*, which are, many of them, in full bloom, exhibiting, like some evergreens, their flowers and fruit at the same time.—See our last volume, pp. 51, 52.

In this month early potatoes are set, hedges repaired, trees lopped, and wet lands drained. Poplars, willows, osiers, and other aquatics, are planted.

Towards the end of February, or the beginning of March, if the weather be not very severe, that domestic and harmless bird, the hedge-sparrow (*motacilla modularis*), begins to intimate by a plaintive, soft chirp, and peculiar shake of its wing, the approach of the pairing season: this motion is so constant and singular, that the local name of 'shuffle-wing' has been given to this bird. It is nearly our earliest breeder, and, using but little art to conceal its nest, it becomes the booty of every prying boy. The eggs of the hedge-sparrow are always found in such numbers on his string, that it is surprising how the race of this bird is continued, particularly when we consider the many casualties to which they are subjected by the domestic habits of the old birds. The plumage of the *motacilla modularis* is remarkably sober and grave, and all his actions are quiet and conformable; his song is short, sweet, and gentle; he perches for a moment on the summit of a bush, utters his brief modulation, and hides himself again: his habitation is the hedge of a cottage garden, whence he seldom wanders far. Unobtrusive, he does not, like the redbreast, enter our houses, but picks minute insects from the edges of drains and ditches, or morsels of potatoes at the door of the poorest dwelling at the village-end. Did we seek for a pattern of a household domestic bird, none could be found with better pretensions to such a character than the hedge-sparrow.

LINES

Written at Tenbury, Worcestershire, on disturbing a Hedge-Sparrow from her Nest.

Little flutterer! swiftly flying,
Here is none to harm thee near;
Kite nor hawk, nor school-boy prying,
Little flutterer! cease to fear.

One who would protect thee ever
From the school-boy, kite, and hawk,
Musing now obtrudes, but never
Dreamt of plunder in his walk.

He no weasel stealing slyly
Would permit thy eggs to take;
Nor the pole-cat, nor the wily
Adder, nor the wreathed snake.

May no cuckoo, wandering near thee,
Lay her egg within thy nest;
Nor thy young one, born to cheer thee,
Be destroyed by such a guest.

Thou perchance, poor little trembler,
Art like one whom I could name,
Fearful, fluttering, no dissembler;
And, like thee, unknown to fame.

One who long hath sought, despairing,
For a secret silent dell,
Whither he and his repairing,
Might with quiet comfort dwell.

There at eve, and after labour,
Would he trill his roundelay;
Or, perchance, with pipe or tabor
Call the early morn away.

Little flutterer! hast thou never
Seen, amid thy wanderings wild,
Such a spot, which might be ever
Hallowed to Fancy's child?

Little flutterer! swiftly flying,
Here is none to harm thee near;
Kite nor hawk, nor school-boy prying,
Little flutterer! cease to fear!

JAMES JENNINGS.

MARCH.

AMONG the Romans, March, from Mars, was the first month; and marriages made in this month were accounted unhappy.

Remarkable Days

IN MARCH 1823.

1.—SAINT DAVID.

SAINT David was the great ornament and pattern of his age. He continued in the see of St. David's many years; and having founded several monasteries, and been the spiritual father of many saints, both British and Irish, he died about the year 544, at a very advanced age.—Early on the 1st of March, the young maidens of the village of Steban Hethe, now called Stepney, used to resort to Goodman's Fields (the only remains of which now not built upon is the Tenter-ground), in search of a blade of grass of a *reddish tint*; the charm being, that the fortunate finder obtained the husband of her wishes within the month.

2.—SAINT CHAD.

St. *Ceadda* or Chad was educated in the monastery of Lindisfarne, under St. Aidan; was afterwards Bishop of Lichfield, and died in the great pestilence of 673.

7.—PERPETUA.

Perpetua, a noble lady of Carthage, only twenty-two years of age, suffered martyrdom in 203, by order of Minutius Firmianus, under the persecution of the Emperor Severus.

9.—MIDLENT SUNDAY.

The middle or fourth Sunday in Lent was formerly called the Sunday of the Five Loaves, the Sunday of Bread, and the Sunday of Refreshment, in allusion to the gospel appointed for this day. It was also named *Rose Sunday*, from the Pope's carrying a *golden rose* in his hand, which he exhibited to the people in the streets as he went to celebrate the eucharist, and at his return.

*9. 1822.—DR. EDWARD DANIEL CLARKE DIED,
ÆT. 54.

The following character of Dr. Clarke appeared in the Cambridge Chronicle for March the 15th, which was afterwards claimed as his writing by the Rev. G. A. Browne, fellow of Trinity College:—

‘ Perhaps no person ever possessed, in a more eminent degree than Dr. Clarke, the delightful faculty of winning the hearts and rivetting the affections of those into whose society he entered. From the first moment, his conversation excited an interest that never abated. They who knew him once, felt that they must love him always. The kindness of his manner, the anxiety he expressed for the welfare of others, his eagerness to make them feel happy and pleased with themselves, when united to the charms of his language, were irresistible. Such was Dr. Clarke in private life: within the circle of his more immediate friends, in the midst of his family, there he might be seen, as the indulgent parent, the affectionate husband, the warm, zealous, and sincere friend. Of his public life, the present moment will only admit of an outline. Soon after taking his degree, Dr. Clarke accompanied the present Lord Berwick abroad, and remained for some time in Italy. The classic scenes he there met with, and his own inquisitive genius, stimulated him to enter into a wider field of research; and, shortly after his return to England, he embarked on those travels which have rendered his name so celebrated throughout Europe; indeed, we may add, in every quarter of the civilized world. To enter into any description of them is needless—they are before the public. They have been, and will continue to be, the delight and the solace of those who have been unable to visit other countries; and they have excited the dormant spirit of curiosity in many a resident of the University, who has followed eagerly the steps of Dr. Clarke, and has invariably borne testimony to the

accuracy and fidelity of his narrative. Dr. Clarke has somewhere mentioned all the excellencies which must unite to form a perfect traveller; he must have the pencil of Norden, the pen of Volney, the learning of Pococke, the perseverance of Bruce, the enthusiasm of Savary. Of all these Dr. Clarke united in his own person by far the greater share. No difficulties in his progress were ever allowed to be insuperable; and, upon all occasions, he imparted to others a portion of his own enthusiasm. It was upon the return from this extensive tour, during which he had visited nearly the whole of Europe, and parts of Asia and Africa, that Dr. Clarke presented to the University those memorials of his travels, which now decorate the vestibule of the library; and, as some return for the splendour which his name had reflected upon the University, he was complimented, in full senate, with the degree of LL.D. From that moment the residence of the traveller was confined to Cambridge, and he shortly after commenced those public lectures on mineralogy, which, if possible, have made his name more known and honoured, both in this and in foreign countries, than even his long and interesting travels. Natural history was his earliest and most favourite study, and that peculiar branch of it which refers to the mineral kingdom soon engrossed the whole of his attention. In the delivery of his celebrated lectures, Clarke was without a rival: his eloquence was inferior to none (in native eloquence, perhaps, few have ever equalled him in this country); his knowledge of his subject was extensive; his elucidation clear and simple; and in his illustrations, which were practically afforded by the various and beautiful specimens of his minerals, he was peculiarly happy. Most of these specimens he had himself collected, and they seldom failed to give rise to the most pleasing associations by their individual locality. We may justly apply to him, in the delivery of his lectures, what

is engraven on the monument of Goldsmith, "*Nihil, quod tetigit, non ornavit.*" Of the higher qualities of his mind, of his force and energy as a Christian preacher, of the sublimity and excellence of his discourses, we might tell in any other place than Cambridge: but here all mention of them is unnecessary; his crowded congregations are testimony sufficient. Of the estimation in which Dr. Clarke was held by foreigners, we may in the same manner refer our readers to the various honorary societies in which his name stands enrolled; we may safely say, that to no one person has the University of Cambridge been more indebted for celebrity abroad, during the last twenty years, than to her late librarian, Dr. Clarke. He has fallen a victim, indeed, to his generous ardour in the pursuit of science—he looked only to the fame of the University; and in his honest endeavours to exalt her reputation, he unhappily neglected his own invaluable health. He has thus left to his afflicted family, and to his surviving friends, the most painful and bitter regrets; while to the University itself he has bequeathed a debt of gratitude, which, we doubt not, will hereafter be amply and liberally discharged.'

On Monday the 18th, the remains of Dr. Clarke were attended to a vault in the chapel of Jesus College by many of the most distinguished members of the University; and a subscription has been entered into to procure a bust of him, by Chantrey, to be placed in some conspicuous part of the University.—The University is in treaty for his valuable collection of Minerals.

12.—SAINT GREGORY.

Saint Gregory, surnamed the Great, was born about the year 540. He was consecrated Pope about the year 590, and died in 604. Before his advancement to the see, Gregory projected the conversion of the English nation, but did not accomplish his wishes until he had assumed the papal chair.

16.—FIFTH SUNDAY IN LENT.

Dominica in Passione, or Passion Sunday, was the name given to this day in missals ; as the church now began to advert to the sufferings of Christ. In the north, it is called *Carling* Sunday, and grey peas, first steeped a night in water, and fried with butter, form the usual repast.

17.—SAINT PATRICK.

The tutelar saint of Ireland was born in the year 371, in a village called *Bonaven Taberniæ*, probably Kilpatrick, in Scotland, between Dumbriton and Glasgow. He died at the good old age of 128, and was buried at Down, in Ulster.

18.—EDWARD KING OF THE WEST SAXONS.

He was stabbed in the back by order of his mother-in-law, Elfrida, at Corfe-castle, in Dorsetshire. Elfrida built monasteries, and performed many penances, in order to atone for her guilt; but could never, by all her hypocrisy or remorse, recover the good opinion of the public, though so easily deluded in those ignorant times.

21.—SAINT BENEDICT.

Benedict, or *Bennet*, founded the monastery of Cassino, in 529: it was built on the brow of a very high mountain, on the top of which there was an old temple of Apollo, surrounded with a grove. The Benedictine order of monks, first instituted by our saint, was, in the ninth century, at its height of glory.

*22.—EVE OF PALM SUNDAY.

‘ Rome, during Lent (observes Lady Morgan), was literally *città morta*, and no contrast could be more striking than Rome on the Friday, and Rome on the *Saturday, preceding palm Sunday*. Naples and Florence yielded up their winter residents to its religious gaieties. The fugitives who had emigrated with the last day of the carnival, returned with the first day of Passion-week. The *Porta del Popolo*, and the dreary region of St. John Lateran, alike teemed with an eager population. The roll of

post carriages, the cracking of the courier's whip, the reading of passports, the overflowing of hotels, the cramming of lodging-houses, gave an entirely new aspect to the lately deserted streets. Whigs and Tories hunted in couples for places in the Vatican; and leaders of opposition and chiefs of the treasury were, for once, seen on the same side of the house. Meantime the *real* pilgrim band, all that faith could muster or gain allure from the mountains of the Abruzzi, or the neighbouring villages, trudged sturdily in, supported by their *bordone* or pilgrim's staff, clad in their oiled-skin robe, "the scallop on their hat before," and the Virgin, painted on tin, suspended round their necks. These are the least profitable visitants that Rome receives. Long unused to such guests, she welcomes them with a coldness of which they alone take no notice. They are bidden to the feast by the church herself, which provides for their lodging and maintenance: few send apologies, and all are ornamental, if not useful; for they are the supernumeraries of the establishment, and they fill up a procession, and bear chorus as well as better men.

' At this epoch all business is at a stand. Signore Vasi may shut up his *Chalcographia*, or print-shop; the ingenious *Mosaici*, who set the Capitol in earrings, hang the Coliseum on the neck of beauty, and clasp the fairest arm with St. Peter in vinculis,—may take down their expensive toys, and, to the relief of all husbands and fathers, close their windows. The curiosity shops no longer tempt the curious; the polishing wheel of the Scarpellino is silent; the antiquarian Cicerone pauses from his eternally repeated *giro*; Messrs. Fea and Nebbi find their "occupation gone;" and the dying gladiator may be a Persian king, or a Cornish wrestler, or any thing else he pleases: for antiquarian polemics are at rest, and all the disputants inquire is, Where the Pope pontificates? at what hour the *miserere* is sung?

on what day the benediction is given? The galleries of the Vatican and the Capitol are deserted as the Campagna; and the antichambers of cardinals and ministers are thronged with applicants for tickets of admission for the Quirinal and St. Peter's.

'At length the important moment arrives; the ladies assume "a customary suit of solemn black," and, accompanied by their male friends, from whom they decently part at the church door (a custom still observed in some of our cathedrals), they proceed on *Palm Sunday* to the Quirinal, where the ceremonies of the week begin.'

23.—PALM SUNDAY.

In the missals, this day is denominated *Dominica in ramis Palmarum*, or Palm Sunday, and was so called from the palm branches and green boughs formerly distributed on that day, in commemoration of our Lord's riding to Jerusalem. The ceremonies observed at Rome on this day are fully described in our last volume, pp. 69-71; see also T.T. for 1821, p. 96, for a custom in Lincolnshire; and T.T. for 1822, p. 68, for the usual observance of this day in Yorkshire.

From the Rev. J. Connor's Journal of his Visit to Candia, Cyprus, and Palestine, printed at the end of the *Rev. W. Jowett's Christian Researches in the Mediterranean*, we select the following account of the ceremonies on Palm Sunday, as observed by the Latin church at Jerusalem. 'On Palm Sunday, March 26, 1820 (observes the writer), I went to see the ceremony of the Latins. After a considerable time had been spent in singing before the door of the sepulchre, the deputy superior of the Latin convent (the superior himself being in Cyprus) entered the sepulchre, with some priests, to bless the palm branches that lay there. When this was done, he left the sepulchre; and, sitting on an elevated chair, received the palms, which had been blessed, from the hands of the priests. These came for-

ward first, and knelt, one after the other, before the deputy superior, receiving from his hand (which they kissed) a branch of the consecrated palm. When this part of the ceremony was concluded, the crowd pressed forward to receive THEIR palms. The confusion and tumult were excessive. The Turks, with their sticks and whips, did all they could to restrain the impetuosity of the people; and had it not been for their great activity, the deputy superior would certainly have been overwhelmed by the crowd. When the palms had been distributed, and the confusion had, in some measure, subsided, the priests and some others walked three times in procession round the sepulchre, with lighted candles, incense, elevated crucifixes, and palms: they sang as they walked. When the procession was ended, an altar, splendidly ornamented, was placed before the door of the sepulchre, and mass was performed.'

25.—ANNUNCIATION OF THE BLESSED VIRGIN MARY, or LADY-DAY.

This day celebrates the angel's message to the Virgin Mary, respecting our Blessed Lord. She was, probably, an only child, and about fifteen years of age when espoused to Joseph. She died A.D. 48, being about sixty years old.

The intelligent author of 'Rome in the Nineteenth Century' gives the following account of the *festa* of the *Annunciation*, as it is still observed on this day at Rome. 'We drove through streets (says the author) lined with expecting crowds, and windows hung with crimson and yellow silk draperies, and occupied by females in their most gorgeous attire, till we made a stop near the church before which the Pope's horse-guards, in their splendid full-dress uniforms, were stationed to keep the ground; all of whom, both officers and men, wore in their caps a sprig of myrtle, as a sign of rejoicing. After waiting a short time, the procession appeared, headed by another detachment of the guards, mounted on

prancing black chargers, who rode forward to clear the way, accompanied by such a flourish of trumpets and kettle-drums, that it looked at first like any thing but a peaceable or religious proceeding. This martial array was followed by a bareheaded priest, on a white mule, bearing the Host in a gold cup, at the sight of which every body fell upon their knees. The Pope used formerly to ride upon the white mule himself, and all the cardinals used to follow him in their magnificent robes of state, mounted either on mules or horses; and as the *Eminentissimi*¹ are, for the most part, not very eminent horsemen, they were generally fastened on, lest they should tumble off. This cavalcade must have been a very entertaining sight. Pius VI, who was a very handsome man, kept up this custom, but the present Pope is far too infirm for such an enterprise; so he followed the man on the white mule, in his state coach; at the very sight of which, we seemed to have made a jump back of two hundred years at least. It was a huge machine, composed almost entirely of plate-glass, fixed in a ponderous carved and gilt frame, through which was distinctly visible the person of the venerable old Pope, dressed in robes of white and silver, and instantly giving his benediction to the people, by a twirl of three fingers; which are typical of the Father, the Son, and the Holy Ghost; the last being represented by the little finger.

On the gilded back of this vehicle, the only part that was not made of glass, was a picture of the Pope in his chair of state, and the Virgin Mary *at his feet*. This extraordinary machine was drawn by six black horses, with superb harness of crimson, velvet and gold; the coachmen, or rather postillions, were dressed in coats of silver stuff, with crimson velvet breeches, and full bottomed wigs well pow-

¹ *Eminentissimo* is the title by which a cardinal is addressed in conversation.

dered, without hats. Three coaches, scarcely less antíquely superb, followed with the assistant cardinals, and the rest of the train. In the inside of the church, the usual tiresome ceremonies went on that take place when the Pope is present. He is seated on a throne, or chair of state; the cardinals, in succession, approach and kiss his hand, retire one step, and make three bows or nods, one to him in front, and one on the right hand, and another on the left; which are intended for him (as the personification of the Father), and for the Son, and for the Holy Ghost, on either side of him; and all the cardinals having gone through these motions, and the inferior priests having kissed his toe—that is, the cross embroidered on his shoe—high mass begins. The Pope kneels during the elevation of the Host, prays in silence before the high altar, gets up and sits down, reads something out of a great book which they bring to him with a lighted taper held beside it; and, having gone through many more such ceremonies, finally ends as he began, with giving his benediction with three fingers, all the way he goes out. During all the time of this high mass, the Pope's military band, stationed on the platform in front of the church, played so many clamorous martial airs, that it effectually put to flight any ideas of religious solemnity.

‘The Pope on this day gives to a certain number of young women a marriage portion of fifty crowns, or sometimes more. Such of them as choose to become the spouse of heaven, carry it to a convent, in which case it is always a larger sum. We expected to have seen them walk in the procession, but it seems the practice has fallen into disuse, and they did not appear. Formerly, the Pope used to portion from one to two hundred young girls, but now that his finances are reduced, the number is necessarily more limited. We heard contradictory accounts of the numbers portioned to-day: the highest statement was between seventy and eighty.’

27.—MAUNDY THURSDAY.

This day is called, in Latin, *dies Mandati*, the day of the command, being the day on which our Lord washed the feet of his disciples, as recorded in the second lesson. This practice was long kept up in the monasteries. After the ceremony, liberal donations were made to the poor, of clothing and of silver money; and refreshment was given them to mitigate the severity of the fast. A relic of this custom is still preserved in the donations dispensed at St. James's on this day.—See T.T. for 1821, pp. 96-98. The modern ceremonies at Rome are described in our last volume, pp. 91-94.

28.—GOOD FRIDAY.

This day commemorates the sufferings of Christ, as a propitiation for our sins. Holy Friday, or the Friday in Holy Week, was its more antient and general appellation; the name *Good Friday* is peculiar to the English church. It was observed as a day of extraordinary devotion. Buns, with crosses upon them, are usually eaten in London and some other places on this day, at breakfast. A very curious account of the modern ceremonies, at Rome, with a particular description of the *Illuminated Cross of St. Peter's*, may be seen in our last volume, pp. 94-99.

The following superstitious penance (according to a modern traveller) is still performed on *Good Friday*, at Rome and in other Catholic places. The ceremony takes place at the time of vespers. It is preceded by a short exhortation, during which a bell rings; and whips, that is, strings of knotted whipcord, are distributed quietly among such of the audience as are on their knees in the middle of the nave. Those resting on the benches come to edify by example only. On a second bell, the candles are extinguished, and the former sermon having ceased, a loud voice issues from the altar, which pours forth an exhortation to think of unconfessed,

or unrepented, or unforgiven crimes. This continues a sufficient time to allow the kneelers to strip off their upper garments: the tone of the preacher is raised more loudly at every word, and he vehemently exhorts his hearers to recollect that Christ and the martyrs suffered much more than whipping—‘*Show, then, your penitence—show your sense of Christ’s sacrifice—show it with the whip.*’ The flagellation begins. The darkness, the tumultuous sound of blows in every direction—‘*Blessed Virgin Mary, pray for us!*’ bursting out at intervals—the persuasion that you are surrounded by atrocious culprits and maniacs, who know of an absolution for every crime—the whole situation has the effect of witchery, and, so far from exciting a smile, fixes you to the spot in a trance of restless horror, prolonged beyond expectation or bearing. The scourging continues ten or fifteen minutes, and, when it sounds as if dying away, a bell rings, which seems to invigorate the penitents, for the lashes beat about more thickly than before. Another bell rings, and the blows subside. At a third signal, the candles are re-lighted, and the minister, who has distributed the disciplines, collects them again with the same discretion; for the performers, to do them justice, appear to be too much ashamed of their transgressions to make a show of their penance; so that it is very difficult to say whether even your next neighbour has given himself the lash or not.

The modern celebration (1820) of *Good Friday at Jerusalem*, is thus described in the *Rev. J. Connor’s* interesting Journal before quoted. ‘On Good Friday there was a grand procession and ceremony of the Latins, in the evening: it commenced with an Italian sermon, in the Catholic chapel, on the flagellation of Christ’. From this place they proceeded to the chapel where, they say, Christ’s gar-

¹ In their Chapel, the Catholics profess to show the pillar where this took place.

ments were taken from him: here was another sermon in Italian. They then ascended Mount Calvary; and passed first into the chapel which marks the spot where Christ was nailed to the cross: the large crucifix and image which they carried in the procession was here laid on the ground, and a Spanish sermon was pronounced over it. When this was finished, the crucifix was raised, and moved into the adjoining chapel of the elevation of the cross: here it was fixed upright behind the altar: a monk, standing by, preached for twenty minutes on the crucifixion. The sermon was in Italian; and when it was concluded, two monks approached the cross, and, partially enveloping the body of the image in linen, took off, with a pair of pincers, the crown of thorns from the head, kissed it, and laid it on a plate: the nails were then drawn out from the hands and feet, with the same ceremony. The arms of the image were so contrived, that, on the removal of the nails which kept them extended, they dropped upon the sides of the body. The image was then laid on linen, and borne down from Calvary to the Stone of Uncion, the spot where they say Christ's body was anointed: here the image was extended; and was perfumed with spices, fragrant water, and clouds of incense: the monks knelt round the stone, with large lighted candles in their hands: a monk ascended an adjoining pulpit, and preached a sermon in Arabic. The procession then went forward to the sepulchre, where the image was deposited, and a sermon preached in Spanish. This closed the ceremony.'—(*Jowett's Researches*, p. 434.)

SONNET,

Written on GOOD FRIDAY, April 5, 1822.

The morning's breath, in meekness to the day,
Breathes o'er the fields a holy silence sweet,
Whilst the young flowers their tender buds display,
That pensive seem the hallowed morn to greet.
The sunny clouds swim lightly through the sky,
Tho' tinged in parts with many a sombre hue;

Like hovering Fate on wings of Destiny,
Their course right on the heav'nly road pursue.
And such a morn (more bright perchance) arose
When HE, the LAMB of GOD, our SAVIOUR, died:
What woe, what pain, he felt before the close
Of that sad day, on earth's yet to be tried.
O, Christians, mourn your Lord,—him ceaseless bless,
Who for your good endured such deep distress.

29.—EASTER EVE.

Particular mortifications were enjoined to the earliest Christians on this day. From the third century, the fast was indispensable and rigid, being protracted always to midnight, sometimes to cock-crowing, and sometimes to the dawn of Easter-day; and the whole of the day and night was employed in religious affairs.—For an account of some singular practices at Rome, see our last volume, pp. 100-103.

The ceremonies of the Greek church at Jerusalem on Easter-eve, are thus noticed by the Rev. J. Connor. 'I went to the church (he observes) to spend the night there, that I might view all the different observances. It is a general belief among the Greeks and Armenians, that, on Easter-eve, a fire descends from heaven into the sepulchre. The eagerness of the Greeks, Armenians, and others, to light their candles at this holy fire, carried an immense crowd to the church, notwithstanding the sum which they were obliged to pay. About nine at night, I retired to rest, in a small apartment in the church. A little before midnight, the servant roused me to see the Greek procession. I hastened to the gallery of the church. The scene was striking and brilliant. The Greek chapel was splendidly illuminated. Five rows of lamps were suspended in the dome; and almost every individual of the immense multitude held a lighted candle in his hand.'—See the continuation of these ceremonies under *Easter-Day*.

30.—EASTER DAY, *or* EASTER SUNDAY.

Much difference of opinion prevailed in the Eastern and Western churches respecting the precise time of observing Easter; till, in 325, the Council of Nice declared that the feast should be kept by all churches on the same day. Easter is styled by the fathers the highest of all festivals, the feast of feasts, the queen of festivals, and *Dominica Gaudii*, the joyous Sunday. Masters granted freedom to their slaves at this season, and valuable presents were made to the poor. A very singular custom formerly prevailed at Lostwithiel, in Cornwall, on this day: see T.T. for 1822, p. 103. Of the splendid ceremonies at Rome on Easter Sunday, a particular account is given in the same volume, pp. 104-107.

The following pleasing anecdote relative to Easter we copy from a recent traveller. . . 'The Emperor of Russia and King of Prussia entered Dresden on Easter-eve, 1813, when the city was illuminated. The words, 'Deliver us from evil,' formed one of the inscriptions displayed on the occasion. On the following morning the Russians celebrated Easter. At break of day the soldiers appeared most carefully dressed, and the Cossacks, the strictest observers of the religious rites of their country, were especially observed purchasing eggs to present to their comrades, or milk to prepare the pascha, or feast of Pentecost. The Russians every where were seen accosting each other in the streets, without distinction of rank, with the salutation, *Christos woskres*, "Christ is risen," which was followed by the reply *Istinnoe woskres*, "Yes, truly, He is risen." In this manner the elegantly dressed officer saluted the bearded Cossack, covered with his mantle of stuff. The Emperor himself did honour to this custom of his country, and having, after midnight, assisted at the solemn mass of Easter, in the Greek chapel, prepared in an apartment of the Bruhl Palace,

which he inhabited, he addressed this pious salutation to all the officers present. The feast of Easter morning was celebrated by the priests of several Russian regiments, in another chapel prepared at the residence of Prince Maximilian.

From 'Mr. Bowring's Specimens of the Russian Poets,' we select the following appropriate lines:—

The GOLDEN PALACE,

Sung at Midnight in the Greek Churches the last Week before Easter.

The Golden Palace of my God
 Tow'ring above the clouds I see:
 Beyond the cherubs' bright abode,
 Higher than angels' thoughts can be:
 How can I in those courts appear
 Without a wedding garment on?
 Conduct me, Thou life-giver, there,
 Conduct me to Thy glorious throne!
 And clothe me with Thy robes of light,
 And lead me through sin's darksome night,
 My SAVIOUR and my God!

MIDNIGHT HYMN

Of the Russian Churches, sung at Easter

Why, thou never-setting Light,
 Is Thy brightness veiled from me?
 Why does this unusual night
 Cloud Thy blest benignity?
 I am lost without Thy ray,
 Guide my wandering footsteps, LORD!
 Light my dark and erring way
 To the portside of Thy word!

The procession and service in the Greek church at Jerusalem are thus noticed by the Rev. J. Connor, as seen in 1820. 'I was awakened early in the morning by the noise in the church; and, on proceeding to my station in the gallery, I found the crowd below in a state of great confusion. Some were employed in carrying others on their backs round the sepulchre; others in dancing and clapping their hands, exclaiming in Arabic—"This is the Tomb of our Lord!" Sometimes a man passed, standing upright on the shoulders of another; and

I saw, more than once, *four* carried along in this manner, a little boy, seated, forming the fourth, or topmost: others again were busy in chasing one another round the tomb, and shouting like madmen. Whenever they saw in the crowd a man who they thought could pay them, they seized and forcibly carried him, in their arms, two or three times round the church. The whole was a most lamentable profanation of the place! The same happens every year. The noise and confusion increased, as the moment appointed for the apparition of the fire approached. At length, the Turks, who had not hitherto interfered, began to brandish their whips, and to still, in some measure, the tumult. About noon, the Governor of Jerusalem, with a part of his guard, entered the gallery. The eagerness and anxiety of the people were now excessive. They all pressed toward the sepulchre, each person holding a bundle of tapers in his hand. The chief agent of the Greek Patriarch, and an Armenian bishop, had entered the sepulchre shortly before. All eyes were fixed on the gallery, watching for the Governor's signal. He made it, and the fire appeared through one of the holes in the building that covers the tomb! A man lighted his taper at the hallowed flame; and then pushed into the thickest of the crowd, and endeavoured to fight his way through. The tumult and clamour were great; and the man was nearly crushed to death, by the eagerness of the people to light their tapers at his flame. In about twenty minutes, every one, both in the galleries and below, men, women, and children, had their candles lighted. Many of them put their lighted candles to their faces, imagining that the flame would not scorch them: I perceived, however, by their grimaces, that they speedily discovered their mistake. They did not permit these tapers to burn long; reserving them for occasions of need. The power which they attribute to those candles that

have been touched with the fire from heaven, is almost unbounded: they suppose, for instance, that if, overtaken by a storm at sea, they throw one of these candles into the waves, the tempest will immediately subside. They are chiefly valued, however, in consequence of the superstitious notion, that, if they are burned at the funeral of the individual, they will most assuredly save his soul from future punishment. To obtain these candles, and to undergo a second baptism in the waters of the Jordan, are the chief objects of the visit of the Greek pilgrims to Jerusalem.

The number of pilgrims who visited Jerusalem in the year 1820, at the time of the Passover, is thus stated by Mr. Connor:—

Greeks	-	-	-	-	1600	
Armenians	-	-	-	-	1300	
Copts	-	-	-	-	150	
Catholics	-	-	-	-	50	{ chiefly from Damascus
Abyssinians	-	-	-	-	1	
Syrians	-	-	-	-	30	
Total					3131	

Mr. Connor (of whose very interesting Journal we have made such liberal use) accompanied the pilgrims in their visit to the River Jordan, who with the muleteers and guards formed a body of about 2300 persons. Their *encampment* is thus described: 'An able artist (says Mr. C.) might have made a very interesting picture of the scene. He would have introduced the numerous and variously-coloured tents—the diversified costumes of the pilgrims—the Turkish horse-soldiers, with their elegant dress and long spears, galloping across the plain—with camels and horses reposing. We spent the remainder of the day here. About half past three the next morning, we all set out, by torch light, for the Jordan. The appearance of the pilgrims, moving in numerous detached parties, with their flambeaux, across the

plain, was singular and striking. The sun rose shortly before we arrived at the brink of the river. There men, women, and children stripped, and plunged into the water. Many employed themselves, while in the river, in washing and thus sanctifying the linen which they destined for their grave-clothes. The Jordan, at the spot where the pilgrims bathed, is beautifully picturesque. Its breadth may be about twenty yards; and it is shaded, on both sides, by the thick foliage of closely-planted trees. The water appeared turbid, and was not deep.—Some Turkish horsemen dashed through the river, and rode to and fro, in the grove on the opposite side, to protect the pilgrims from the guns of the Bedouins, many of whom were assembled to watch the ceremony. On retiring from the water, the pilgrims employed themselves in cutting branches from the trees, to carry home with them as memorials of the Jordan. They then mounted their beasts, and returned to their former station on the plain. Our party set off from the Jordan, with Prince Avaloff (a Georgian) and his suite, to the Dead Sea, where we arrived in about two hours and a half. We rambled about, for some time, on the borders of this lake, which covers the ashes of Sodom and Gomorrah. I tasted the water, and found it excessively nauseous. Some of the party bathed. On our return, we traversed the fertile part of the plain—passed through the village of Jericho—and returned to our tents about noon. Most of the pilgrims had already started for Jerusalem. After taking a slight refreshment, we returned to the city by the same way that we had come, and entered by the gate of St. Stephen.

31.—EASTER MONDAY.

Every day in this week was formerly observed as a religious festival, sermons being preached, and the sacrament administered. It is unnecessary to observe that this practice has long ceased, and that the Eas-

ter week is usually devoted to relaxation and amusement.—An account of some curious practices on these days in different parts of England, will be found in our last volume, pp. 107-108.

In *Somersetshire*, a barbarous sport was till lately, and now is, we believe, occasionally practised on this day, and on Easter Tuesday. It was called *cock-squailing*, and consisted in tying a cock to a stake, and throwing sticks at him from a given distance, so as to destroy the bird. We merely mention this game in order to deprecate it. To *squail*, therefore, means, in the Somerset dialect, to fling a stick at a cock or other animal. [J.]

Astronomical Occurrences

IN MARCH 1823.

SOLAR PHENOMENA.

THE SUN enters Aries at 49 m. after 9 in the morning of the 21st of this month, and this introduces SPRING, 'the earliest and fairest daughter of the year;' the import of whose presence is, 'Lo! the winter is past, the rain is over and gone, the flowers appear on the earth, the time of the singing of birds is come, and the voice of the turtle is heard in our land; the fig-tree putteth forth her green figs, and the vines with the tender grapes give us good smell. Arise, and come away!' The Sun also rises and sets, during this period, as in the following

TABLE

Of the Sun's Rising and Setting for every fifth Day.

March 1st, Sun rises	36 m. after 6.	Sets	24 m. past 5
6th,	25	5	35
11th,	15	6	45
16th,	6	6	54
21st,	56	5	4
26th,	46	5	14
31st,	36	5	24

Equation of Time.

When apparent time, or that indicated by a good sun-dial, is known, mean time is found by adding to it the numbers in the following

TABLE

Of the Equation of Time for every fifth Day.

Saturday, March	1st, to the time by the dial	add	^{m.} 12	^{s.} 43
Thursday,	6th,		11	38
Tuesday,	11th,		10	23
Sunday,	16th,		9	0
Friday,	21st,		7	31
Wednesday,	26th,		5	59
Monday,	31st,		4	25

LUNAR PHENOMENA.

Phases of the Moon.

Last Quarter, 4th day, at 48 m. after	6 in the evening
New Moon, ... 12th	34
First Quarter, 19th	18
Full Moon, ... 26th	41

Moon's Passage over the Meridian.

As exercises for our young readers, we have selected, the following from the Moon's transits this month, which will afford them opportunities of observation, if the weather be favourable:

March 4th, at 19 m. after	5 in the morning
5th, ... 10	6
6th, ... 1	7
7th, ... 51	7
8th, ... 40	8
19th, ... 58	5 in the afternoon
20th, ... 59	6
21st, ... 57	7 in the evening
22d, ... 52	8
23d, ... 43	9
24th, ... 32	10
25th, ... 19	11

PHENOMENA PLANETARUM.

Phases of Venus.

Nearly the whole disk of this beautiful planet is still enlightened by the solar beams, as the following is the proportion of her phases:

March 1st, {	Illuminated part = 11.50306 digits
	Dark part..... = 0.49694

Eclipses of Jupiter's Satellites.

Though there will be numerous eclipses of the first and second satellites this month, only three of each will be visible in the neighbourhood of London; and the following are the times at which they will take place at the Royal Observatory: viz.

Emersions.

First Satellite, 4th day, at 47 m. 48 s. past 10 at night				
20th	38	25	8	
27th	34	13	10	
Second Satellite, 3d	7	18	9	

Immersiones.

Second Satellite, 3d day, at 32 m. 4 s. after 6 in the evening				
10th	7	56	9 at night	

TABLE

Of the Meridional Transits and Altitudes of the Planets.

	1st	7th	13th	19th	25th
	TRANSITS.				
	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
Mercury	10 47 <i>mor.</i>	10 23	10 18	10 20	10 25
Venus	1 2 <i>aft.</i>	1 7	1 12	1 17	1 23
Mars	0 21 <i>aft.</i>	0 16	0 11	0 6	0 1
Jupiter	5 0 <i>aft.</i>	4 41	4 22	4 4	3 47
Saturn	3 30 <i>aft.</i>	3 10	2 50	2 31	2 12
G. Sidus	8 1 <i>mor.</i>	7 39	7 18	6 57	6 34
	ALTITUDES.				
		<i>25° 6'</i>	<i>25° 1'</i>	<i>26° 0'</i>	<i>27° 55'</i>
Mercury	26 29				
Venus	36 58	38 59	42 5	45 8	48 6
Mars	31 50	33 42	35 36	37 30	39 24
Jupiter	57 50	58 1	58 13	58 25	58 38
Saturn	49 53	50 5	50 18	50 32	50 45
G. Sidus	15 8	15 9	15 9	15 10	15 11

Other Phenomena.

On the morning of the 4th, the Moon will be in conjunction with the bright star α , in Scorpio, at 27m. after 6. Mercury will also be stationary on the same day; and he will attain his greatest elongation on the 16th. The Moon will be in conjunction with Georgium Sidus at 29 m. after 2 in the morning of the 7th, and with Mercury at 39m. past 1 in the afternoon of the 10th. Mars will be in conjunction at 10 in the morning of the 25th; and the Moon will

again be seen to coincide in longitude with α , in Scorpio, at 57 m. past 2 in the afternoon of the last day of this month.

The phenomena of the heavens have not only regulated the common affairs of life, but have been a constant theme with the poets from the remotest antiquity. Thus sang the Mantuan bard:—

Give me the ways of wand'ring stars to know;
The depths of heav'n above, and earth below.
Teach me the various labours of the Moon,
And whence proceed eclipses of the Sun;
Why flowing tides prevail upon the main,
And in what dark recess they shrink again;
What shakes the solid earth; what cause delays
The summer nights, and shortens winter days.

VIRGIL'S GEORGICS.

DESCRIPTION AND USE OF ASTRONOMICAL INSTRUMENTS.

[Continued from p. 49.]

The RETICULE, or CROSS WIRES.

This is a simple contrivance, by which the number of observations is multiplied, and the accuracy of the result greatly increased. To explain its nature and effects, let ABDE (in *Fig. 1*) represent a section of the telescopic tube, perpendicular to its axis, or of the diaphragm with which the tube is often supplied to prevent the reflection of the oblique rays.

Fig. 1.

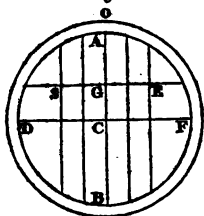
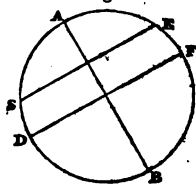


Fig. 2.



A fine wire, DF, is attached to the edges of this ring by means of two small screws, and passes through the centre C. When the telescope is placed in the meridian, this is called the horizontal wire, and per-

pendicular to it there are five others ; the centre one, AB, bisecting DF in C, while the other four are placed at equal distances, two on each side of AB.

As the time in which a heavenly body passes the field of view of a telescope varies according both to the diameter of the instrument and the polar distance of the body, it would be nearly impossible to ascertain when its centre coincided with the axis of the telescope, if it were not furnished with some such apparatus as this. The state of modern science, however, requires this precision ; and a brief explanation of its use will enable our readers to comprehend in what manner it is attainable.

When the instrument is fixed in the plane of the meridian, the motion of the body will be apparently horizontal ; and both the centre C and the point G, which is the middle of ES, will be in the vertical line bisecting DF, and consequently in the plane of the meridian. If the subject of observation be a star, and the apparent diameter of the wire be equal to that of the star, then the moment it is entirely hidden by the central wire will be that of its passing the meridian of the place of observation. In most cases, however, the metallic thread is sufficiently fine to bisect the star ; and then, at the moment of its passage, an equal portion of the disk will be seen on each side of the wire ; and as the body is so small, the eye, accustomed to such observations, will readily seize this moment, within a small fraction of a second. The same may obviously be done for each of the other four vertical wires, which, being at equal distances from one another, the times of the star passing them will form an arithmetical series ; therefore, by taking the mean of the five observations, we shall have the time of the star passing the centre wire more correctly than could be obtained in any single instance. If the observation be made with care, this method may be depended upon for giving the result within a tenth of a second.

If the instrument be not placed in the plane of the meridian, the motion of the star will be oblique, and then it is necessary to give the same inclination to the wire DE, so that the motion in ES may be parallel to it, as shown in *Fig. 2*: this is done by a proper apparatus applied to the telescope for that purpose. The greatest obstacle which is experienced in observations of this kind is when the night is very dark, and there is not sufficient light to see the wires, except at the moments when the star is bisected by one of them: this, however, is so instantaneous, that the observer is not always prepared for noting the time of the bisection. To avoid this, the following method of enlightening the tube is frequently adopted:—A small hole is made in the side of the telescope, and generally in the axis on which it turns; and opposite this aperture a mirror is placed, having an inclination of 45° to the axis of the telescope. The light of a small lamp is then made to fall on the mirror, and having the angle of incidence of its rays equal to 45° , it is reflected in the same angle, and the rays are consequently parallel to the axis of the instrument, and render the wires sufficiently visible. If the star upon which the observation is made be small, care must be taken that the artificial light is not too strong, otherwise the star will not be perceptible.

Observations of this kind are not, however, confined merely to the stars; both the Sun and the Moon are frequently the subjects upon which they are made. But the comparative magnitudes of these render it necessary to follow a different process to ascertain the moment when their centres pass the meridian, or rather the axis of the instrument. For this purpose, the several instants when the eastern or western limb of the body comes successively into contact with each of the five wires must be carefully noted, and the sum of these times, divided by five, will be the moment when that limb passed the central

wire. When this is accomplished, the other limb will be about leaving the first wire, and the five instants of its transit must be noted in precisely the same manner as for the first limb; and when their sum is divided by 5, the quotient will, in like manner, be the time of its passing the central wire. Consequently the mean of the times for the opposite limbs will give the transit of the centre.

These operations are so simple, and the reasons upon which they are founded so obvious, that it will not be necessary to enter into any further explanation of the subject, particularly as a little experience will be more instructive than any lengthened description. When this telescope is used for astronomical purposes, it is chiefly attached to other instruments; and the precision above described relative to the passage of the body over the axis of the telescope would be of little use, unless equal accuracy could be obtained in determining the *direction* of that axis, both with respect to its horizontal and vertical position. We shall, therefore, pursue the subject next month, in describing the instruments to which it is usually attached, as well as in explaining the nature of their adjustments, so as to obtain the necessary precision.

The Naturalist's Diary

For MARCH 1823.

Oh! how delightful to the soul of man,
How like a renovating spirit comes,
Fanning his cheek, the breath of infant Spring!
Morning awakens in the orient sky
With purpler light, beneath a canopy
Of lovely clouds, their edges tipped with gold;
And from his palace, like a deity,
Darting his lustrous eye from pole to pole,
The glorious SUN comes forth, the vernal sky
To walk rejoicing. To the bitter north
Retire wild Winter's forces,—cruel winds,—
And griping frosts,—and magazines of snow,—

And deluging tempests. O'er the moistened fields
 A ~~tender~~ green is spread; the bladed grass
 Shoots forth exuberant; th' awakening trees,
 Thawed by the delicate atmosphere, put forth
 Expanding buds; while, with mellifluous throat,
 The warm ebullience of internal joy,
 The birds hymn forth a song of gratitude
 To HIM who sheltered, when the storms were deep,
 And fed them through the winter's cheerless gloom.

Beside the garden-path, the *crocus* now
 Puts forth its head to woo the genial breeze,
 And finds the *snowdrop*, hardier visitant,
 Already basking in the solar ray.
 Upon the brook the *water-cresses* float
 More greenly, and the bordering reeds exalt
 Higher their speary summits. Joyously,
 From stone to stone, the *oazel* flits along,
 Startling the *linnet* from the hawthorn bough;
 While on the elm-tree, overshadowing deep
 The low-roofed cottage white, the *blackbird* sits,
 Cheerily hymning the awakened year.

Turn to the OCEAN—how the scene is changed!
 Behold the small waves melt upon the shore
 With chastened murmur! Buoyantly on high
 The *sea-gulls* ride, weaving a sportive dance,
 And turning to the Sun their snowy plumes.
 With shrilly pipe, from headland or from cape,
 Emerge the line of *plovers*, o'er the sands
 Fast sweeping; while to inland marsh the *heron*,
 With undulating wing scarce visible,
 Far up the azure concave journies on!
 Upon the sapphire deep, its sails unfurled,
 Tardily glides along the fisher's boat,
 Its shadow moving o'er the moveless tide;
 The bright wave flashes from the rower's oar,
 Glittering in the Sun, at measured intervals;
 And, casually borne, the fisher's voice
 Floats solemnly along the watery waste;
 The shepherd boy, enveloped in his plaid,
 On the green bank, with blooming furze o'ertopped,
 Listens, and answers with responsive note. Δ¹.

THE superabundant moisture of the earth being dried up, the process of vegetation is gradually brought on: those trees which, in the last month,

¹ Blackwood's Magazine for March 1822, p. 304.

were budding, now begin to put forth their leaves; and the various appearances of Nature announce the approach of SPRING.

The melody of birds now gradually swells upon the ear. The throstle (*turdus musicus*), second only to the nightingale in song, charms us with the sweetness and variety of its lays. The linnet and the goldfinch join the general concert in this month, and the golden-crowned wren (*motacilla regulus*) begins its song. The lark, also, must not be forgotten:—

In the golden lightning
Of the sunken sun,
O'er which clouds are bright'ning,
Thou dost float and run,
Like an embodied joy whose race is just begun.

The pale purple even
Melts around thy flight;
Like a star of heaven
In the broad daylight
Thou art unseen, but yet I hear thy shrill delight.

In this month, black ants (*formica nigra*) are observed; the blackbird and the turkey (*meleagris gallopavo*) lay; and house pigeons sit. The greenfinch (*loxia chloris*) sings; the bat (*vespertilio*) is seen flitting about; and the viper uncoils itself from its winter sleep. The wheatear (*sylvia cenanthe*), or English ortolan, again pays its annual visit, leaving England in September.

Those birds which have passed the winter in England now take their departure for more northerly regions; as the fieldfare (*turdus pilaris*), the red-wing (*turdus iliacus*), and the woodcock (*scolopax rusticola*). Some other birds, as the crane and stork, formerly natives of this island, have quitted it entirely, since our cultivation and population have so rapidly increased.

On the 20th, the vernal equinox takes place, and all nature feels her renovating sway, and seems to rejoice at the retreat of winter.

The general or great flow of sap in most trees

takes place in this month ; this is preparatory to the expanding of the leaves, and ceases when they are out.

The gooseberry and currant bushes now show their young leaves ; the ash its grey buds ; and the hazel and the willow exhibit some signs of returning life in their silky enfolded catkins. The *camellia japonica* is the chief ornament of the green-house in this month, bearing very handsome and justly admired clusters of beautiful flowers.

Our gardens begin now to assume somewhat of a cheerful appearance. Crocuses, exhibiting a rich mixture of yellow and purple, ornament the borders ; mezereon is in all its beauty ; the little flowers ' with silver crest and golden eye,' daisies, are scattered over dry pastures ; and the pilewort (*ranunculus ficaria*) is seen on the moist banks of ditches. The primrose too (*primula veris*) peeps from beneath the hedges.

The PRIMROSE.

I saw it in my evening walk,

A little lonely flower ;

Under a hollow bank it grew,

Deep in a mossy bower.

An oak's gnarled root to roof the cave,

With gothic fretwork sprung,

Whence jewelled fern, and arum leaves,

And ivy garlands hung.

And close beneath came sparkling out,

From an old tree's fall'n shell,

A little rill, that clipt about

The lady in her cell.

And there, methought, with bashful pride,

She seemed to sit and look,

On her own maiden loveliness

Pale imaged in the brook.

No other flower, no rival grew

Beside my pensive maid ;

She dwelt alone, a cloistered nun,

In solitude and shade.

No sunbeam on that fairy pool

Darted its dazzling light ;

Only, methought, some clear, cold star
Might tremble there at night.

No ruffling wind could reach her there—
No eye, methought, but mine;
Or the young lambs that came to drink
Had spied her secret shrine.

And there was pleasantness to me
In such belief:—cold eyes
That slight dear Nature's loveliness
Profane her mysteries.

Long time I looked and lingered there,
Absorbed in still delight;
My spirit drank deep quietness
In with that quiet sight.

In March, trouts begin to rise, and blood-worms appear in the water. The clay hair-worm (*gordius argillaceus*) is now found at the bottoms of drains and ditches, of a pale yellow colour, like the extremities of a fibrous root divested of its bark, or the fine strings of a harp coiled up and twisted together. The whole body of this animal consists of numerous annulations, or rings, which the creature has the power of contracting or dilating, when it becomes nearly a foot long, and smooth like a wire: the extreme points are transparent, and apparently harder. The designation of many of our land and water insects is very obscure, and from their minuteness, the places they inhabit, and the secrecy of their actions, we have little opportunity of becoming acquainted with their several functions; this hair-worm, however, is supposed to perforate and form openings in clayey lands, which then become passages for water, admitting the roots of vegetables, and, in time, fertilizing the soil.

The equinoctial gales are usually most felt, both by sea and land, about this time.

The leaves of honeysuckles are now nearly expanded: in our gardens, the buds of the cherry tree (*prunus cerasus*), the peach (*amygdalus persica*), the nectarine, the apricot, and the almond (*prunus*

armeniaca), are fully opened in this month. The buds of the hawthorn (*crataegus oxyantha*) and of the larch tree (*pinus larix*) begin to open; and the tansy (*tanacetum vulgare*) emerges out of the ground; ivy-berries are ripe; the cotton-grass (*eriphorum vaginatum*), wood spurge (*euphorbia amygdaloides*), butcher's broom (*ruscus aculeatus*), the daffodil (*pseudonarcissus*) in moist thickets, the rush (*juncus pilosus*), the spurge laurel (*daykne laureola*), and the coltsfoot (*tussilago*), found in woods, are now in bloom. A remarkable fact, never yet noticed by any author, may here be mentioned concerning the coltsfoot: wherever the earth from canals, roads, &c. is thrown up from the depth of five or six feet, or more, below the surface, in every part of England with which the writer has been acquainted, soon after its being so thrown up, coltsfoot is found growing in more or less abundance. In all probability the seeds of this plant have remained dormant for ages, till brought by this process to the surface, when light, air, heat, and moisture, prompt their vegetation.—(J.)

The common whitlow grass (*draba verna*) on old walls; the yellow Alpine whitlow grass (*draba aizoides*) on maritime rocks; and the mountain pepperwort (*lepidum petraeum*) among limestone rocks, flower in March.

The sweet violet (*viola odorata*) sheds its delicious perfumes in this month.

To an EARLY VIOLET.

Sweet, lovely harbinger of Spring,
Earliest gift in Flora's ring,
Thy scent exhales on Zephyr's wing—

Sweet Violet!

I found you in the lone vale, bare,
In purest hue, sweet flow'ret rare,
And you shall have my dearest care,

Sweet Violet!

You stood like damtless Virtue pure,
You did the pitiless storm endure,
And now from harm I'll you secure,

Sweet Violet!

Within my jessamine parterre,
'Mid myrtles sweet, and lilies fair,
You now may live, and blossom there,

Sweet Violet!

The barren strawberry (*fragaria sterilis*), and the yew tree (*taxus baccata*), are now in flower, and the elder tree (*sambucus nigra*) begins to put forth its flower buds. The hepatica (*anemone hepatica*), unless the weather be severe, gives brilliance to the garden with its bright pink flowers; and the houndstongue (*cynoglossum*) with its more modest flowers of pink or light blue. It is a common and vulgar error to suppose that the roots of the *cynoglossum* will drive away mice and rats.

The smelt (*salmo eperlanus*) begins to ascend rivers to spawn, when they are taken in great abundance. The gar-fish, gar-pike, or horn-fish (*esox bellone*), appears in this month. It is most esteemed in Devonshire and Dorsetshire, though not upon the Essex coast and in London.—See our last vol. p. 79.

The gannets or Soland geese (*pelicanus bassanus*) resort in March to the Hebrides, and other rocky isles of North Britain, to make their nests and lay their eggs.

Much amusement may be derived in this month, as well as in the last, from watching the progress of worms, insects, &c. from torpidity to life, particularly on the edges or banks of ponds.—See T.T. for 1817, p. 58.—At the end of March, a brimstone-coloured butterfly (*papilio rhamni*) appears.

Bees may now be seen in the garden culling their various sweets. It appears that, in this year (1822), bees have, in an unusual manner, broken away from their hives, and formed settlements for themselves; probably influenced by the early warmth of the season, which rendered their hives uncomfortable, and

softened the wax of the combs; for although these creatures have the power of exciting, when required, a great degree of heat in their habitations, it does not appear that they have any method of lowering a natural temperature, when it becomes unpleasant or injurious.—For an account of a remarkable superstition respecting the bee, see our last volume, p. 80.

Towards the end of the month black beetles may be seen flying about in the evening; and bats issue from their places of concealment. Roach and dace float near the surface of the water, and sport about in pursuit of insects. Daffodils are in flower; peas appear above ground; the sea-kale (*crambe maritima*), a vegetable somewhat similar to, but more delicate than, asparagus, now begins to sprout. The male blossoms of the yew-tree expand and discharge their farina. Sparrows are busily employed in forming their nests. Young lambs are yeaned this month; and young *otters* are produced, which, as they grow up, prove as destructive in a pond, as a polecat in a hen-house.—See T.T. for 1821, pp. 87, 88.

In March, the farmer dresses and rolls his meadows; spreads ant-hills; plants quickets, osiers, &c.; sows flax seed, artificial grasses, beans and peas, broom and whin seeds, and grass seeds among wheat. About the 23d, he ploughs for and sows oats, and hemp and flax. A dry season is very important to the farmer, that he may get the seed early into the ground.

The pursuits of *shooting and hunting* having finished with the last month, the various animals have an interval allowed them to bear and rear their young; a circumstance which has occasioned the following lines of a modern poet:—

The SEASON of LOVE.

Oh! warm is the sunbeam that plays on my frame,
And genial the zephyr upon me that blows;
The songsters around me the season proclaim,
And v'lets their elegant perfumes disclose:

All, all is delight through the field and the grove,
For this is the season—the season of love!

The sportsman has laid by his engine of death,
The huntsman no longer awakens his horn,
The courser has ceased to stray o'er the heath,
And quiet and peace keep the woodland and lawn;
And all is delight through the field and the grove
In this blessed season—the season of love!

APRIL.

APRIL is derived from *Aprilis*, of *aperio*, I open; because the earth, in this month, begins to open her bosom for the production of vegetables.

Remarkable Days

IN APRIL 1823.

1.—EASTER TUESDAY.—See p. 74.

1.—ALL OR AULD FOOLS' DAY.

ON this day every body strives to make as many fools as he can: the wit chiefly consists in sending persons on what are called sleeveless errands, for the *history of Eve's mother*, for *pigeon's milk*, *stirrup oil*, and similar ridiculous absurdities.—See our last volume, p. 96.—In some parts of Somersetshire the name of *April* fool is not known, the 1st of *May* being the day on which fools are made.

3.—RICHARD, Bishop.

Richard, surnamed *de Wiche*, from a place in Worcestershire where he was born, was educated at the Universities of Oxford and Paris. He was as remarkable for his learning and diligence in preaching, as he was for integrity.

4.—SAINT AMBROSE.

Our saint was born about the year 340, and was educated in his father's palace, who was Prætorian Præfect of Gaul. He converted the celebrated St. Augustine to the faith, and, at his baptism, composed that divine hymn, so well known in the church, by the name of *Te Deum*. He died, aged fifty-seven.

6.—LOW SUNDAY.

It was a custom among the primitive Christians, on the first Sunday after Easter-day, to repeat some part of the solemnity of that grand festival; whence this Sunday took the name of *Low Sunday*, being celebrated as a feast, though in a lower degree.

*11. 1822.—R. DODD DIED, ÆT. 66,

Long known as an engineer and architect, and projector of several bridges and other important works; among which are, Account of the principal Canals in the known World, with Reflections on the Utility of Canals, 8vo, 1795—Reports, with Plans and Sections, of the proposed dry Tunnel from Gravesend to Tilbury; also a Canal from Gravesend to Stroud, 4to, 1798—Letters on the Improvement of the Port of London, demonstrating its practicability without Wet Docks, 1799—Observations on Water, 8vo, 1805.

19.—SAINT ALPHEGE.

A native of England, Alphege was first Abbot of Bath, then Bishop of Winchester, in the year 984, and, twelve years afterwards, Archbishop of Canterbury. After seven months' miserable imprisonment by the Danes, the good archbishop was stoned to death at Greenwich.

23.—SAINT GEORGE.

Saint George is the patron Saint of England; for which the following reason is assigned: When Robert Duke of Normandy, the son of William the Conqueror, was fighting against the Turks, and laying siege to the famous city of Antioch, which was expected to be relieved by the Saracens, St. George

appeared with an innumerable army coming down from the hills clad all in white, with a red cross on his banner, to reinforce the Christians; which so terrified the infidels, that they fled, and left the Christians in possession of the town.—See T.T. for 1821, p. 107.—The King's birth-day is kept on this day, being his *name-day*, in imitation of the custom in catholic countries.

25.—SAINT MARK.

St. Mark's Gospel was written in the year 63. The order of knights of St. Mark at Venice, under the protection of this evangelist, was instituted in the year 737, the reigning doge being always grand master: their motto was, '*Pax tibi, Marce, Evangelista Meus.*'

The custom of sitting and watching in the church porch of St. Mark's Eve, still exists in some parts of the north of England. The 'witching time of night' is from eleven till one; and the third year the watcher supposes that he sees the ghosts of those who are to die the next year pass by into the church. This superstitious observance naturally leads us to the consideration of the *belief in apparitions*. The pious and eloquent Addison, in some reflections on this subject, beautifully observes, 'If we believe, as many wise and good men have done, that there are such Phantoms and Apparitions as those I have been speaking of, let us endeavour to establish to ourselves an interest in Him who holds the reins of the whole creation in his hand, and moderates them after such a manner, that it is impossible for one being to break loose upon another without His knowledge and permission. For my own part,' continues he, 'I am apt to join in opinion with those who believe that all the regions of nature swarm with Spirits; and that we have multitudes of spectators on all our actions, when we think ourselves most alone: but, instead of terrifying myself with such a notion,

I am wonderfully pleased to think that I am always engaged with such an innumerable society, in searching out the wonders of the creation, and joining in the same concert of praise and adoration.' He goes on to say, 'MILTON has finely described this mixed communion of Men and Spirits in Paradise; and had doubtless his eye upon a verse in old *Hesiod*, which is almost word for word the same with his third line in the following passage:'

Nor think, though men were none,
That Heaven would want spectators, God want praise:
Millions of Spiritual Creatures walk the earth
Unseen, both when we wake, and when we sleep;
All these with ceaseless praise his works behold
Both day and night. How often, from the steep
Of echoing hill and thicket, have we heard
Celestial voices to the midnight air,
(Sole, or responsive each to other's note)
Singing their Great Creator. Oft in bands,
While they keep watch, or nightly rounding walk,
With heav'nly touch of instrumental sounds,
In full harmonic numbers joined, their songs
Divide the night, and lift our thoughts to Heav'n.

In another paper, speaking of popular superstitions, he says, 'I know but one way of fortifying my soul against these gloomy presages and terrors of mine, and that is by securing to myself the friendship and protection of that Being who disposes of events, and governs futurity. He sees, at one view, the whole thread of my existence, not only that part of it which I have already passed through, but that which runs forward into all the depths of eternity. When I lay me down to sleep, I recommend myself to His care; when I awake, I give myself up to His direction. Amidst all the evils that threaten me, I will look up to Him for help, and question not but He will either avert them, or turn them to my advantage. Though I know neither the time, nor the manner of the death I am to die, I am not at all solicitous about it; because I am sure that He knows them.

both, and that He will not fail to support me under them!'

Nothing can be more reprehensible than the too common practice in nurses and servants, of alarming the tender minds of children with the idle tales of hobgoblins, haunted houses, &c. the effects of which are to impress them with that timidity, which is afterwards removed with the greatest difficulty, even when advanced in life, and with minds naturally superior to such little things. Sporting with the passions is always a dangerous project, for by such imprudence the mind may be so deranged as to be incapable of ever acting again with regularity and composure. Children also should never be permitted to frighten one another; many have been involved in the most awful situations from this apparently trivial cause, and have fallen into a state of idiotism, or absolute lunacy. Many from the sudden impulse of terror, have, from such wanton frolics, lost their lives; while others again have had their intellects so much impaired, as to be rendered miserable, and altogether disqualified for the occupations of life.

*29. 1822.—SIR ISAAC HEARD, KNT., GARTER PRINCIPAL KING OF ARMS, DIED, ET. 91!

*The boast of heraldry, the pomp of power,
Alike await th' inevitable hour!—*

He was indefatigable in the execution of his office, and always acted with acute discrimination and strict conscientiousness. He was a good Latin scholar; and his knowledge of modern languages, some of which he spoke with great readiness, particularly qualified him for those missions to foreign courts which constituted an important part of his official duty. Few men have been more distinguished for urbanity of manners, habitual cheerfulness, and benevolence of heart. The elegant turn of his mind,

* An admirable antidote to every species of spectral delusion will be found in Rev. Mr. Plumptre's *Sermon on Apparitions* (Rivington).

and his extraordinary memory, which a long intercourse with polished society had richly stored, rendered him dear to a large circle of acquaintance; while the tenderness of his disposition, and the purity of his moral and religious habits, commanded the affectionate veneration of his domestic and private friends. His last and dying wish was to be buried in the Chapel of St. George's, Windsor, near the remains of his late Royal Master; and it is pleasing to be able to record, that the Dean and Chapter have complied with his request.

Astronomical Occurrences

In APRIL 1823.

SOLAR PHENOMENA.

THE Sun enters Taurus at 19 m. after 10 in the evening of the 20th of this month; and rises and sets as in the following

TABLE

Of the Sun's Rising and Setting for every fifth Day.

April 1st, Sun rises	35 m. after 5.	Sets	25 m. after 6
6th,	25	5	35
11th,	15	5	45
16th,	5	5	55
21st,	56	4	4
26th,	47	4	13

Equation of Time.

To find true from apparent time, the hour indicated by the dial must be increased or diminished by the numbers in the following

TABLE

Of the Equation of Time for every fifth Day.

Tuesday, April 1st, to the time by the dial add.....	4	^{m.}
Sunday..... 6th,	2	^{s.} 37.
Friday..... 11th,	1	12
Wednesday..... 16th, from the time by the dial subtract	0	6
Monday..... 21st,	1	16.
Saturday..... 26th,	2	15

LUNAR PHENOMENA.*Phases of the Moon.*

Last Quarter, 3d day, at 10 m. past	3 afternoon
New Moon, 11th 48	6 morning
First Quarter, 18th 49	0
Full Moon, 25th 59	6

Moon's Passage over the Meridian.

From the passages of the Moon over the first meridian which take place this month, the following have been selected as affording the student convenient opportunities for observation, if the weather prove favourable at those times.

April 8th, at 39 m. after 5 in the evening	
9th, ... 34	6
10th, ... 25	7
11th, ... 11	8
12th, ... 54	8
13th, ... 35	9
14th, ... 14	10
15th, ... 53	10
16th, ... 33	11
24th, ... 23	5 in the morning
25th, ... 18	6
26th, ... 10	7
27th, ... 1	8

PHENOMENA PLANETARUM.*Phases of Venus.*

This beautiful planet still remains nearly like a full moon; the following being the proportion of her light and dark phases:—

April 1st, { Illuminated part = 11·00909 digits
{ Dark part = 0·99091

Eclipses of Jupiter's Satellites.

There will be twenty-five eclipses of Jupiter's first and second satellites this month, but only two of them will be visible at Greenwich and its vicinity, viz.

Emersions.

First Satellite, 12th day, at 54 m. 42 s. past 8 at night
Second Satellite, 4th 48 10 8

Form of Saturn's Ring.

April 1st, { Transverse axis	1·000
{ Conjugate axis	— 0·994

TABLE
Of the Meridional Transits and Altitudes of the
Planets.

	1st	7th	13th	19th	25th
TRANSITS.					
	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
Mercury	10 36 <i>mor.</i>	10 49	11 4	11 23	11 44
Venus	1 30 <i>aft.</i>	1 36	1 43	1 50	1 58
Mars	11 56 <i>mor.</i>	11 51	11 45	11 40	11 35
Jupiter	3 27 <i>aft.</i>	3 9	2 52	2 35	2 18
Saturn	1 50 <i>aft.</i>	1 3	1 11	0 52	0 33
G. Sidus	6 11 <i>mor.</i>	5 49	5 27	5 5	4 42
ALTITUDES.					
Mercury	31°12'	34°49'	39° 6'	43°57'	49° 8'
Venus	51 24	54 1	56 23	58 32	60 20
Mars	41 35	43 26	45 14	47 0	48 42
Jupiter	58 54	59 7	59 20	59 33	59 46
Saturn	51 2	51 16	51 30	51 45	51 59
G. Sidus	15 11	15 11	15 11	15 11	15 11

Other Phenomena.

Georgium Sidus will be in quadrature at 45 m. past midnight of the 1st of this month. The Moon will also be in conjunction with this planet at 59 m. after 11 in the morning of the 3d. Mercury and Mars will be in conjunction on the 23d, when the former planet will be $39\frac{1}{2}'$ south of the latter. On the 27th there will be an occultation of the star α in Scorpio by the Moon. The star will disappear, or the *Immersion* will take place, at 26 m. after 9 in the morning, when the star will be $11\frac{1}{2}'$ north of the Moon's centre. It will re-appear, or the *Emersion* will occur, at 1 m. 45 s. past 10; and the star will then be $13\frac{1}{4}'$ north of the Moon's centre. Thus the whole duration of the eclipse will be 35 m. 45 s. Here it may be observed, for the information of the astronomical tyro, that these epochs are expressed in apparent Greenwich time, and that the occultation itself is such, as it will be observed at the Royal Observatory; but the circumstances will not differ much in most other parts of the kingdom. As the disappearance of the star is so instantaneous, if the occultation be observed at a place, where the latitude

is well known, it affords a good method of finding its longitude.

Mercury will be in his superior conjunction at half past 8 in the morning of the 29th. Venus and Jupiter will also be on the same meridian on that day; when the former planet will be $95\frac{1}{2}'$ north of the latter.

DESCRIPTION AND USE OF ASTRONOMICAL INSTRUMENTS.

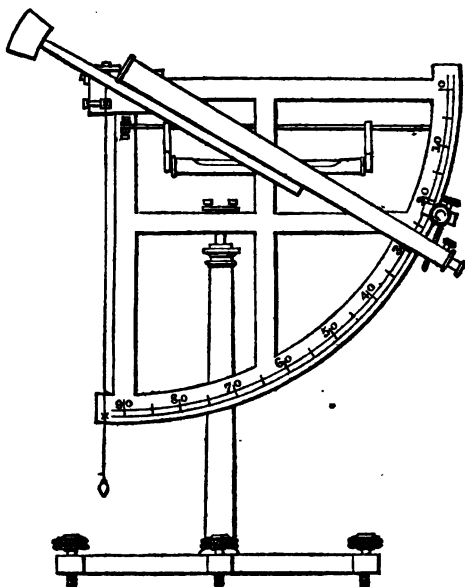
[Continued from p. 81.]

PORTABLE ASTRONOMICAL QUADRANT.

This instrument has been made of various forms; and numerous methods of adjustment have been proposed by different artists. It would, however, be equally as impossible within our limits, as it would be inconsistent with our plan, to attempt any general description of these. We shall, therefore, give only a single specimen, selecting one of those which have been considered the most perfect; and from which we hope our readers will easily understand the use of any of the others. The *fig.* in the next page represents a Portable Quadrant made by Ramsden, for the Observatory of Christ's College, Cambridge.

The quadrant itself moves horizontally on the stem which supports it; and the tripod on which it is mounted has adjustment screws for placing this stem perpendicular, which is the case when the plumb-line bisects both the superior and inferior dots during a complete horizontal revolution of the instrument. The outer part of the stem consists of a brass tube, which fits so closely at each extremity to a solid steel axis, as to be altogether free from lateral motion; the stem consequently retains any position given to it, so long as the bottom screws are not moved. The telescope rests on a bar, which carries the counterpoise, and in which is the centre of motion. This telescope has likewise the usual apparatus for effecting its slow and gradual move-

ment to the exact position required by the observation: it is also furnished with a system of wires in the focus of the eye-glass, which can be readily adjusted by means of screws: the point of suspension of the plumb-line is likewise subject to adjustment by



suitable screws. The top of the tube or stem has a small circle, with clamping apparatus attached to it for effecting a slow horizontal motion, by which the whole quadrant, with its telescope and other appendages, is gradually moved in the azimuth. When the observation is to be made either in or near the zenith, the plumb-line is in the way of the telescope, and then requires to be removed; but its use is supplied by means of a spirit-level suspended from a horizontal brass rod, placed beneath the upper radius of the quadrant. This level not only supplies the place of the plumb-line, when circumstances require

its removal, but serves at all times as a check upon its adjustment. The quadrant is likewise furnished with a *Vernier*, and all that is necessary for reading off the arcs with great accuracy, and which may be readily done to 10ths of seconds. The adjustment of the instrument requires some explanation.

In these adjustments, the first thing to be done is to bring the axis to a vertical position: when the plumb-line is employed for this purpose, turn the quadrant horizontally till the telescope becomes parallel to a line joining any two of the feet by which the whole is supported: then turn one of the foot screws till the wire bisects the lower dot, and with the proper screw bring the upper dot to the wire. When this is done, reverse the telescope by turning the instrument 180° in the azimuth; and then, if both dots are again bisected, the axis is vertical in reference to that direction in which the telescope pointed. The telescope is next to be turned so as to point to the third foot of the tripod, and the wire made to bisect the lower dot by turning the proper screw; and it will also be found to bisect the upper dot, if the first adjustment was properly made: but if it does not, the operations must be repeated till both the dots are bisected in all the reversed positions of the instrument, when the pedestal will be in the proper vertical direction.

A second important adjustment is that which relates to the collimation of the telescope, by which it is made parallel to the line that passes from the centre of the quadrant to zero on the limb, at the same time that zero on the vernier coincides with zero on the quadrantal arc. Various methods have been proposed for accomplishing this; but the two following, which serve as effectual checks to each other, will be sufficient; they will also serve at the same time to detect any error, should there be any, in the total arc. The one of these relates to the vertical,

and the other to the horizontal radius of the quadrant. To adjust the vertical line:—the axis of the quadrant being brought into the perpendicular by the method already described; fix upon a star near the zenith, when exactly on the meridian, and measure the altitude by the cross-wire in the field of view in the usual way, and note the result. If these readings, the one on the quadrantal arc, and the other on the excess of that arc beyond 90° , prove to be at equal distances from the point 90° , the horizontal wire is truly placed; but if not, half the difference of the readings must be corrected by means of the proper screw for raising or depressing the wire. This may be done by directing the cross-wire to a distant mark till it bisects it; and then moving the screw of the slow motion of the vernier half the quantity required, and by bringing back the cross-wire thus displaced to its original mark: a repetition of the operation will place the cross-wire in such a situation, that zero on the vernier will be in its proper position with respect to the point 90° ; or, when the half difference is ascertained, it may remain as an error of adjustment, to be applied with the sine *plus* or *minus*, as a correction of future observations, as circumstances may render it necessary.

To adjust the instrument by means of the horizontal line passing through the zero on the limb of the quadrant, a second telescope is required: this should turn on pivots at the back of the quadrant, and be on a level with the said horizontal line. This may with propriety be called the adjusting telescope, and may be directed to any distant mark, both before and after an altitude is taken, for the purpose of detecting any deviation in the vertical position of the axis that may take place during the operation. It is necessary first to ascertain if this telescope be properly fixed: for this purpose make it bisect some distant object by its cross-wire, and then after turning it

half round, if the object be again bisected by the same wire, the telescope is truly fixed. If the mark is not cut by the wire in the reversed position of the telescope, another, either higher or lower, as the case may require, must be chosen, and the cross-wire made to bisect it when the telescope is reversed, by turning the proper screws: it will thus be adjusted for collimation. The zero on the vernier must next be brought to coincide with the zero on the limb, and the telescope of observation directed to the distant mark by which the adjusting telescope had been brought to its true position. This mark being bisected by both telescopes, while the level and the plumb-line show that the vertical axis is perpendicular, turn the quadrant half round its azimuth, and reverse the adjusting telescope, so as to see the same mark again; and if it be found to cut it as before, the horizontal line of the quadrant will be correct, and the whole arc without error, supposing the telescope of observation to have been previously adjusted for collimation by the point 90° , as above described.

In these adjustments it has been supposed that the cross-wire was perfectly horizontal, or that the parallel lines were perpendicular to the horizon. This, however, is easily proved; for by directing the telescope to a fine distant mark, if one of the vertical wires continue to bisect it through the whole field of view, while the telescope is elevated or depressed, the position of the wires is correct; but if not, they must be brought to their proper position by turning the screws designed for that purpose. In all good instruments, the plane of the quadrant should be parallel to its axis of motion, and the line of collimation of the telescope should also be parallel to that plane.

[To be continued.]

The Naturalist's Diary

For APRIL 1823.

Thou sendest forth Thy spirit, they are created; and Thou renewest the face of the earth.—PSALM CIV, 30.

DURING the death and the darkness of winter, we walk forth, as into an unbounded burial ground: the nicest eye, the most minute investigation, cannot, in many instances, discover one single trace of all that profusion of vegetable and animal life which so lately figured and flourished. The leaf, and the fruit, and the stem, and the very root of the plant, are gone; and the future being, not only of the individual insect, but of the race itself, rests upon an existence so minute and diminutive, as to elude the very closest observation. But, the spirit of renewal being sent forth, the Sun having advanced in his annual circuit, dispersing light and heat, and calling up life and joy, in his progress;—the fields and the forests, over which winter had brooded in death and in darkness, rejoice, and swell, and freshen, and bud, and burst into life.—There is a resurrection from the dead,—and the air, and the earth, and the water, are peopled with inhabitants, who have apparently shared in the benefit of so general a revival.

It is in **SPRING**—more audibly, perhaps, than during any other season—that the voice of God comes down upon us, and comes up around us,—and breaks in through all the accessible parts of our moral apprehensions, in tones of irresistible and sustained endearment. It is in spring that Divine goodness walks forth unveiled—that the pastures of the wilderness do spring,—that the fig-tree and the vine put on their promise—that the Spirit of renewal is sent forth,—and a general expression of cheerfulness prevails. It is in spring that the foot which presses the soil, falls more lightly,—while the song of love and of joy is borne up, on the wings of harmony, even to

heaven's gate. It is in spring, that, aided by association, combination, and reflection, man is enabled to convert the visible features of beauty, the varied and pleasing attitudes of nature, into an inexhaustible source of enjoyment¹.

The 'changeable' character of the weather in the month of April, sometimes mild, with gentle showers, and occasionally frosty, has been noticed by most of our poets: it is thus prettily described by Chamberlayne, one of the bards of England's good 'olden time':—

Look how a bright and glorious morning, which
The youthful brow of April doth enrich,
Smiles, till the rude winds blow the troubled clouds
Into her eyes; then in a black veil shrouds
Herself, and weeps for sorrow.

But April, like human life, has her splendid lights, as well as her deepening shadows; and

the darkest day
Live till to-morrow will have passed away.

In the language of Mr. WORDSWORTH, with some of whose exquisite *Sonnets* we have enriched our pages,

Now the storm hath ceased, the birds regain
Their cheerfulness, and busily retrim
Their nests, or chaunt a gratulating hymn
To the blue ether and bespangled plain.

In our last year's Diary for May, we introduced some observations on the appearances of *Spring* in *Persia*: pass we now to *Sweden*, and let us contemplate the beautiful description of her Spring, as given by Mr. Richter:—'A Swedish Spring,' he observes, 'which is always a late one, is no repetition, in a lower key, of the harshness of winter; but anticipates, and is a prelibation, of perfect summer,—laden with blossoms—radiant with the lily and the rose; insomuch, that a Swedish summer night re-

¹ The Seasons contemplated in the Spirit of the Gospel, by the Rev. T. Gillespie. (Cadell, 1822.)

presents implicitly one half of Italy, and a winter night one half of the world beside. After the lapse of half a year, all at once there strikes upon the heart something more beautiful than Italy, where the Sun sets so much earlier in summer time than it does in Sweden; and what is *that*? It is the longest day, with the rich freight that it carries in its bosom, and leading by the hand the early dawn, blushing with rosy light, and melodious with the caroling of larks at one o'clock in the morning. Before two, that is, at sun rise, all the flowers are glittering, and the forests are gleaming with the mighty light. The warm Sun threatens with no storm, nor thunder showers, for both are rare in Sweden. That a longest day like this, bearing such a cornucopia of sunshine, of cloudless ether, of buds and bells, of blossoms and of leisure, should pass away more rapidly than the shortest, is not difficult to suppose. At eight o'clock in the evening, the Sun is now burning more gently over the half-closed sleepy flowers; about nine he has mitigated his rays, and is beheld bathing, as it were naked, in the blue depths of heaven: about ten, the tepid Sun, now sunk to the horizon, is still shedding a sullen glow upon the cottages and window frames; every thing reposes in profoundest silence and sleep: the birds even are all slumbering in the golden summits of the woods; and, at last, the solitary Sun himself sets, like a moon, amidst the universal quiet of nature. Coolness comes, and a few stars. The night-violet and gilly-flowers open, and breathe out their powerful odours. To the north, from the eternal morning of the pole, exhales, as it were, a golden dawn. A few brief, warm hours, and all at once starts up the morning Sun in his freshness; then, again, begin pleasure and morning in their pomp of radiance!

The month of April is a very interesting one to the *ornithologist*, as, at this period, most of our migrating birds return from their travels, and we recog-

nise in the grove and the hedgerow the voices of many of our old acquaintances, which we as much expect to hear about this time, as if an appointment were made for that purpose; and we greet them as the harbingers of a delightful season. A person well conversant with birds will know them as certainly by their voice, or flight, as if the creature were in his hand; but the *parus* tribe (tom tits), in the spring, have such a variety of notes, that they at times surprise, and occasion a disappointment: we hear an unusual note, and creep with caution to observe the stranger it proceeds from, and at length perceive our old acquaintance searching with his usual activity the lichens of an old apple-tree. All these birds (*parus major*, and *p. ater* in particular) will often acquire or compound a note not common to each other, seem delighted with it for a day, and then we hear it no more. The larger tom tit (*p. major*) has two particular calls which he uses in the spring and autumn, so invariable, that they are become familiar to every gardener; and no spring passes without our hearing the singularly harsh notes of this beautiful bird.

The arrival of the swallow, about the middle of the month, foretels the approach of summer. The next bird that appears, is the *motacilla lusciniæ*, or nightingale. To this charming songster our *nine* published volumes¹ are full of elegant tributes; and yet can we never tire of the pleasing theme.

Ye warbling chanters of the wood,
That fill the eares with nature's laies,
Thinking your passion's understood
By weaker accents, what's your praise
When Philomell her voice doth raise?

SIR H. WOTTON.

¹ See particularly T. T. for 1822, pp. 116-122, an account of the abundance of nightingales in Persia and the East, some elegant verses by Hafiz, and Crashaw's translation of Strada's beautiful poem on the contest of the nightingale with the musician.

To H. C.

Upon Occasion of leaving his Countrye, and Sweetnesse of his Verse.

Englands sweete nightingale! what frights thee so,
 As over sea to make thee take thy flight,
 And there to live with native countreyes foe,
 And there him with thy heavenly songs delight?
 What! did thy sister swallowe thee excite
 With her, for winter's dread, to flye away?
 Who is it, then, hath wrought this other spite,
 That when, as she returneth, thou shouldst stay?
 As soone as spring begins, she cometh ay:
 Returne with her; and thou like tidings bring:
 When once men see thee come, what will they say?
 Loe! now of English-poesie comes the Spring!
 Come, feare thou not the cage, but loyall be,
 And ten to one thy soveraigne pardons thee.

HENRY CONSTABLE.

From the time of Homer to the present day, the poets have ever considered the *nightingale* as a melancholy bird: we have before (T. T. for 1815, p. 139, 140, and for 1821, p. 118) combated this opinion, and have, we think, sufficiently proved that it is entirely erroneous. To the authorities formerly adduced in support of our observations, we add the following. The first is from one of our early bards, who were good judges of nature's music, and admirable sketchers of her ever beautiful scenery; the second is from a great political character, now consigned to the grave, whose elegant taste and classical acquirements are admitted by all parties.

The chearful birds

With sweetest notes do sing their Maker's praise:
 Among the which the *merrie* nightingale,
 With *swete* and *swete*, her breast against a thorn,
 Rings out all night.

Vallans, Tale of Two Swannes.

The following Letter of the HON. C. J. Fox, while it confirms the accurate description of the poet, will also serve to show Mr. F.'s fondness for literary inquiries, and for works of imagination and poetry. His letters are filled with complaints of the inter-

ruptions to his studies that arose from politics, while he speaks with delight and complacency of whole days devoted to Euripides and Virgil.

‘ Dear GREY,

‘ In defence of my opinion about the nightingales, I find Chaucer, who of all poets seems to have been the fondest of the singing of birds, calls it a *merry* note ; and, though Theocritus mentions nightingales six or seven times, he never mentions their note as plaintive or melancholy. It is true he does not call it any where merry, as Chaucer does ; but by mentioning it with the song of the blackbird, and as answering it, he seems to imply that it was a cheerful note. Sophocles is against us ; but even *he* says, lamenting Itys, and the comparison of her to Electra is rather as to perseverance by day and night, than as to sorrow. At all events, a tragic poet is not half so good authority in this question as Theocritus and Chaucer. I cannot light upon the passage in the *Odyssey*, where Penelope’s restlessness is compared to the nightingale ; but I am sure that it is only as to restlessness and watchfulness that he makes the comparison. If you will read the last twelve books of the *Odyssey*, you will certainly find it, and I am sure you will be paid for your hunt, whether you find it or not. The passage in Chaucer is in the *Flower and Leaf*, p. 99. The one I particularly allude to in Theocritus, is in his *Epigrams*, I think in the fourth. Dryden has transferred the word *merry* to the goldfinch, in the *Flower and the Leaf* ; in deference, may be, to the vulgar error ; but pray read his description of the nightingale there : it is quite delightful. I am afraid I like these researches as much better than those that relate to Shaftesbury, Sunderland, &c. as I do those better than attending the House of Commons.

‘ Your’s, affectionately,

‘ C. J. Fox.’

Although we bear willing testimony to the transcendant powers of our heavenly musician, the nightingale, may we not suppose that her chaunt acquires an adventitious charm from its being unaccompanied by the notes of any other bird, and from its being generally heard in the still season of night ? The bard of Avon, with whom, however, we do not entirely agree in this case, goes still further : he says,

The crow doth sing as sweetly as the lark,
When either is attended ; and, I think,
The *nightingale*, if she should sing by day,
When ev’ry goose is cackling, would be thought
No better a musician than the wren.

That beautiful little bird, the wryneck (*jynx torquilla*) makes its appearance about the middle of the month, preceding the *cuckoo* by a few days. The well-known cry of the *cuculus canorus* is heard soon after the wryneck, and ceases the latter end of June: its stay is short, the old cuckoos being *said* to quit this country about the end of June; but it is more probable that its departure is delayed till about the end of August. *All*, however, do not leave England, as well-authenticated instances have recently occurred of cuckoos, like swallows, being found in a state of torpidity.

The other summer birds of passage which arrive this month, make their appearance in the following order: the ring-ousel (*turdus torquatus*), the red-start (*motacilla phœnicurus*), frequenting old walls and ruinous edifices; the yellow wren (*motacilla trochilus*), the swift, the white-throat (*motacilla sylva*), the grasshopper lark (*alauda trivialis*), the smallest of the lark kind; and, lastly, the willow wren, which frequents hedges and shrubberies, and feeds on insects, in search of which it is continually running up and down small branches of trees. The house-wren destroys many pernicious insects. The *stone-curlew*, or great plover, arrives about this time.—For some observations on the *sleep of birds*, see T.T. for 1821, p. 121.

The author of the ‘Widow’s Tale, and other Poems,’ has vividly sketched the beauties of this delightful month in a charming little poem, entitled ‘The April Day,’ which, even without the date of ‘20th, 1820,’ would, from its freshness and accuracy, have suggested the supposition that it was from actual observation. No heedless or unskilful eye could have caught the marks and tokens, which must have been noted down at the minute they occurred.

All day the low-hung clouds have dropt
 Their garnered fulness down;
 All day that soft grey mist hath wrapt
 Hill, valley, grove, and town.

There has not been a sound to-day
 To break the calm of nature;
 Nor motion, I might almost say,
 Of life or living creature:
 Of waving bough, or warbling bird,
 Or cattle faintly lowing;
 I could have half believed I heard
 The leaves and blossoms growing.
 I stood to hear—I love it well,
 The rain's continuous sound,
 Small drops, but thick and fast they fell,
 Down straight into the ground.
 For leafy thickness is not yet
 Earth's naked breast to screen,
 Though ev'ry dripping branch is set
 With shoots of tender green.
 Sure, since I looked at early morn,
 These honeysuckle buds
 Have swelled to double growth; that thorn
 Hath put forth larger studs;
 That lilacs' cleaving cones have burst,
 The milk-white flowers revealing;
 Even now, upon my senses first
 Methinks their sweets are stealing:
 The very earth, the steamy air,
 Is all with fragrance rife!
 And grace and beauty ev'ry where
 Are flushing into life.
 Down, down they come—these fruitful stores!
 These earth-rejoicing drops!
 A momentary deluge pours,
 Then thins, decreases, stops.
 And, ere the dimples on the stream
 Have circled out of sight,
 Lo! from the west, a parting gleam
 Breaks forth, of amber light.
 * * * *
 But yet behold—abrupt and loud,
 Comes down the glitt'ring rain;
 The farewell of a passing cloud,
 The fringes of its train.

Want of space forbids us from pursuing the details
 of the picture—the effects of the sudden sunshine on
 the birds—the passing of a train of cows from the
 pasture—and, lastly, of a flock of sheep, which

Wind into the stream of light
That pours across the road,
And all the moving mass is bright
In one broad yellow flood.

* * * *

The shepherd saunters last—but why
Comes with him, pace for pace,
That ewe? and why, so piteously,
Looks up the creature's face?
Swung in his careless hand, she sees,
(Poor ewe!) a dead cold weight,
The little one her soft warm fleece
So fondly cherished late.
But yesterday, no happier dam
Ranged o'er those pastures wide
Than she, fond creature! when the lamb
Was sporting by her side.
It was a new-born thing—the rain
Poured down all night—its bed
Was drenched and cold. Morn came again,
But the young lamb was dead.
Yet the poor mother's fond distress
Its ev'ry art had tried
To shield, with sleepless tenderness,
The weak one at her side.
Round it all night she gathered, warm,
Her woolly limbs—her head
Close curved across its feeble form;
Day dawned, and it was dead.
She saw it dead—she felt, she knew
It had no strength, no breath,—
Yet how could she conceive, poor ewe!
The mystery of death?
It lay before her, stiff and cold;
Yet fondly she essayed
To cherish it in love's warm fold,
Then restless trial made;
Moving with still reverted face,
And low complaining bleat,
To entice from their damp resting-place
Those little stiff'ning feet.
All would not do, when all was tried—
Love's last fond lure was vain;
So quietly by its dead side
She laid her down again.

The process of vegetation is general and rapid in this month. The blackthorn or sloe (*prunus spinosa*)

puts forth its elegant flowers; a host of others follow, among which may be named the ash (*fraxinus excelsior*), ground-ivy (*glecoma hederacea*), and the box-tree (*buxus sempervirens*). The apricot, the peach, nectarine, the wild and garden cherry, and the plum (all of which contain a portion of *prussic acid*, or the peculiar principle of almonds); gooseberry and currant trees, the hawthorn (*crataegus oxyantha*), and the sycamore (*acer pseudo-platanus*), are now in flower. The blossoms of the apple and pear present to the eye a most agreeable spectacle, particularly in those counties which abound with orchards.

The beech (*fagus sylvatica*) and the larch (*pinus-larix rubra*) are now in *full leaf*. The larch, also, exhibits its red tufts or flowers, which soon expand into cones, and the fir tribe show their cones also. That magnificent and beautiful tree, the horse-chesnut (*hippocastanum*), now displays its honours of fine green leaves and its handsome 'spikes pyramidal' of white and red flowers: it is quite the glory of forest trees.

The laurel is in flower; and that universal favourite, the *violet*, is still seen and loved, for its own and for remembrance sake.

To the YELLOW VIOLET.

By an American Poet.

When beechen buds begin to swell,
And woods the blue-bird's warble know,
The yellow violet's modest bell
Peeps from the last year's leaves below.

Ere russet fields their green resume,
Sweet flow'r! I love, in forest bare,
To meet thee, when thy faint perfume
Alone is in the virgin air.

Of all her train, the hands of Spring
First plant thee in the wat'ry mould;
And I have seen thee blossoming
Beside the snow-bank's edges cold.

Thy parent Sun, who bade thee view
Pale skies, and chilling moisture sip,
Has bathed thee in his own bright hue,
And streaked with jet thy glowing lip.

Yet slight thy form, and low thy seat,
And earthward bent thy gentle eye,
Unapt the passing view to meet,
When loftier flow'rs are flaunting high.

Oh, in the sunless April day
Thy early smile has stayed my walk ;
But 'midst the gorgeous blooms of May
I passed thee on thy humble stalk.

So they who climb to wealth forget
The friends in darker fortunes tried ;
I copied them—but I regret
That I should ape the ways of pride.

And when again the genial hour
Awakes the painted tribes of light,
I'll not o'erlook the modest flow'r
That made the woods of April bright.

Many and lovely are the *flowers* which are showered, in profusion, from the lap of April: among them may be named the jonquil, anemone, ranunculus, polyanthus, and the crown imperial. The double white, the yellow, and some others of the earlier tulips, are fully opened in this month; but the more illustrious varieties will not blow for some weeks. This tribe is the gayest offspring of floriculture. Other flowers which adorn our fields, at this time, are the chequered daffodil (*fritillaria meleagris*), the primrose¹, the cowslip (*primula veris*)², the lady-smock

¹ And now the *primrose* finely strews the path,
And sweetest *violets* lay down their heads.
At some tree's root, on mossie feather-beds.

W. BROWNE.

² ' When I awoke in the morning, I went up to the window: the first thing I saw was the church; I remembered that my mother's body had been lying out all night, and ran as fast as I could to the churchyard. The dark pit was not to be seen, nor could I find where it had been for some time. On the spot was a sort of mound raised up, like many others in the churchyard, coved with fresh turf, and bound together with osiers. One little *cowslip* was growing up among the grass; the soft pale green stem of this flower was no longer than a long blade of grass; but I was quite glad to see it,

(*cardamine pratensis*), and the harebell (*hyacinthus non scriptus*).

The HAREBELL.

With drooping bells of clearest blue,
 Thou didst attract my childish view,
 Almost resembling
 The azure butterflies that flew
 Where on the heath thy blossoms grew,
 So lightly trembling.

Where feathery fern and golden broom
 Increase the sand-rock cavern's gloom,
 I've seen thee tangled,
 'Mid tufts of purple heather bloom
 By vain Arachne's treacherous loom
 With dew-drops spangled.

'Mid ruins tumbling to decay,
 Thy flowers their heavenly hues display,
 Still freshly springing,
 Where pride and pomp have past away
 On mossy tomb and turret gray,
 Like friendship clinging.

When glow-worm lamps illumine the scene,
 And silvery daisies dot the green,
 Thy flowers revealing,
 Perchance to soothe the fairy-queen,
 With faint sweet tones on night serene,
 Thy soft bells pealing.

But most I love thine azure braid,
 When softer flowers are all decayed,
 And thou appearest
 Stealing beneath the hedgerow shade,
 Like joys that linger as they fade,
 Whose last are dearest.

Thou art the flower of memory;
 The pensive soul recalls in thee
 The year's past pleasures;

and every morning I went to look if the little buds were blown, and, when the weather was very dry, I always watered it. After it left off blowing, I never forgot it; but loved its little crimped half-hidden leaves better than all the brightest summer flowers: now there are more than thirty cowslips on my mother's grave. A cowslip was her favourite flower.'—*May you Like It*, 12mo. 1822.

And, led by kinder thought, will flee,
Till, back to careless infancy,
The path she measures.

Beneath autumnal breezes bleak,
So faintly fair, so sadly meek,
I've seen thee bending,
Pale as the pale blue veins that streak
Consumption's thin, transparent cheek,
With death-hues blending,

Thou shalt be sorrow's love and mine ;
The violet and the eglantine
With spring are banished.
In summer's beam the roses shine,
But I of thee my wreath will twine,
When these are vanished.

May You Like It.

The yellow star of Bethlehem (*ornithogalum luteum*) in woods ; the vernal squill (*scilla verna*) among maritime rocks ; and the wood-sorrel (*oxalis acetosella*), are now in full flower. The leaves of the wood-sorrel abound with acid, which is extracted, and, when crystallized, forms the salt of lemons, useful for removing stains in linen. This and the wood anemone (*anemone nemorosa*), now in flower, have both white blossoms, and inhabit shady woods. The elm (*ulmus campestris*) is in full leaf.—See some beautiful lines by Lord Byron in our last volume, p. 126.

Young *moles* are now to be found in their nests ; this is a good time, therefore, for destroying them. *Weasels* and *stoats* are great enemies to moles, and frequently get into their holes, kill the inhabitants, and take up their own abode there.

The tenants of the air are, in this month, busily employed in forming their temporary habitations, and in rearing and maintaining their offspring.—For poetical illustrations, see our former volumes.

About the middle of April, the bittern (*ardea stellaris*) makes a hollow booming noise, during the

night in the breeding season, from its swampy retreats.

To a WATER-FOWL.

By an American Poet.

Whither 'midst falling dew,
While glow the heavens with the last steps of day,
Far through their rosy depths, dost thou pursue
Thy solitary way?

Vainly the Fowler's eye
Might mark thy distant flight to do thee wrong,
As, darkly painted on the crimson sky,
Thy figure floats along.

Seek'st thou the plashy brink
Of weedy lake, or maze of river wide,
Or where the rocking billows rise and sink
On the chafed ocean side?

There is a Power whose care
Teaches thy way along that pathless coast,—
The desert and illimitable air,—
Lone wandering, but not lost.

All day thy wings have fanned,
At that far height, the cold thin atmosphere;
Yet stoop not, weary, to the welcome land,
Though the dark night is near.

And soon that toil shall end;
Soon shalt thou find a summer home, and rest,
And scream among thy fellows; reeds shall bend
Soon o'er thy sheltered nest.

Thou'rt gone, the abyss of heaven
Hath swallowed up thy form; yet, on my heart,
Deeply hath sunk the lesson thou hast given,
And shall not soon depart.

He, who from zone to zone,
Guides through the boundless sky thy certain flight,
In the long way that I must tread alone,
Will lead my steps aright.

Various kinds of insects are now seen 'sporting in the sun-beams,' and living their 'little hour.' The jumping spider (*aranea scenica*) is observed on garden walls; and the webs of other species of spiders are found on the bushes, palings, and outsides of houses. The *tulus terrestris* appears, and the death-watch

(*termes pilsaterius*) beats early in the month. The wood-ant (*formica herculanea*) now begins to construct its large conical nest. Little maggots, the first state of young ants, are now to be found in their nests. The shell-snail comes out in troops; the stinging-fly (*conops calcitrans*) and the red-ant (*formica rubra*) appear.

The mole-cricket (*gryllus gryllotalpa*) is the most remarkable of the insect tribe seen about this time. The blue flesh-fly (*musca vomitoria*) and the dragon-fly (*libellula*) are frequently observed towards the end of the month. The great variegated *libellula* (*libellula varia* of Shaw), which appears, principally, towards the decline of summer, is an animal of singular beauty. The cabbage butterfly also (*papilio brassica*) now appears. The black slug (*limex ater*) abounds at this season.—See T.T. for 1821, p. 128; and on the best mode of destroying them, p. 129. The newt (*lacerta aquatica*) lies buried during the winter months in the mud of stagnant waters, but may now be seen crawling along the bottoms of ponds and deep ditches, seeking for its food the minute insects that frequent those stations.

River fish leave their winter retreats, and again become the prey of the angler.

In the narrow sunny plashes near,
 Observe the puny piscatory swarm,
 That with their tiny squadrons tack and veer,
 Cruising amidst the shelves and shallows warm,
 Chasing, or in retreat, with hope or fear
 Of petty plunder or minute alarm;
 With clannish instinct how they wheel and face,
 Inherited arts, inherent in the race:
 Or mark the jetty, glossy tribes that glance
 Upon the water's firm unruffled breast,
 Tracing their antient labyrinthic dance
 In mute mysterious cadence unexpressed.

WHISTLECRAFT.

Towards the end of the month, the song of the black-cap (*motacilla atricapilla*) is heard, affording

great delight to the lovers of rural harmony. He is very destructive in the garden, and is particularly fond of the Antwerp raspberry, and a ripe jargonel pear.—See T.T. for 1821, p. 122.

The spring flight of pigeons (*columba*) appears in this month, or early in the next.

Dry weather is still acceptable to the farmer, who is employed in sowing various kinds of grain, and seeds for fodder, as buck-wheat, lucerne, sainfoin, clover, &c. The young corn and springing-grass, however, are materially benefited by occasional showers. The important task of weeding now begins with the farmer, and every thistle cut down, every plant of charlock pulled up, may be said to be not only an advantage to himself, but a national benefit.—On weeds, see T.T. for 1821, p. 163.

MAY.

MAY is so called from *Maia*, the mother of Mercury, to whom sacrifices were offered by the Romans on the 1st of this month; or, according to some, from respect to the senators and nobles of Rome, who were named *Majores*, as the following month was termed Junius, in honour of the youth of Rome.

Remarkable Days

As MAY 1823.

1.—MAY DAY.

ALL ranks, formerly, went out into the woods a maying early on the first of this month; returning laden with boughs and garlands, and spending the remainder of the day in dancing round a May-pole. This custom is still preserved in various remote districts of England: generally speaking, however, the

vivacity of May-day is confined to the chimney-sweepers, as if in mockery, and to a few would-be morris-dancers about the country, who look foolish and beg halfpence.

From our *Huntingdonshire* correspondent we have received the following information respecting the modern celebration of May-day in some provincial towns and villages. The chief remains (he remarks) of the observance of this day in our provincial towns and villages in modern times, is in the *garlands* which are exhibited by the children. To a horizontal hoop two semi-hoops are affixed vertically at right angles, forming a sort of crown, and to these are affixed flowers, ribands, handkerchiefs, necklaces, silver spoons, and whatever finery can be procured: this is suspended, at a considerable height above the road, by a rope extending across from house to house (from chimney to chimney of the lowly cottage), while the children attempt to throw their balls over it from side to side, singing, and some begging halfpence from passengers: a May-lady or doll, or larger figure, dressed up, sometimes makes an appendage in some side nook. The money thus collected is afterwards spent in a tea-drinking, with cakes, &c., when something like the following lines are said or sung by the children:—

The MAY-DAY GARLAND.

The lilac, laburnum, the iris, and cheer,
 The hawthorn, the cowslip, the king-cob, so gay;
 Each beauty which gladdens the spring of the year,
 And the 'kerchiefs and ribands our friends have supplied,
 In bows and in streamers are tastefully tied,
 And form our sweet garland—our garland of May.
 Beneath it we'll dance and we'll throw up the ball,
 And all shall be gladness, good-humour, and play;
 We'll sing, and in chorus we'll join one and all,
 And glad as the season we'll lift up our voice,
 And all within measure and reason rejoice
 Beneath this gay garland—this garland of May.

May-day is, in some parts of Lincolnshire, the

day for changing servants, previously to which that nuisance in a house, a *general cleaning*, takes place.

Dr. Clarke, in the second volume of his *Travels* (4to, p. 229), speaking of customs handed down to us from the antients, says, 'The custom of blowing horns upon the first of May (Old Style) is derived from a festival in honour of Diana. These antient customs of the country did not escape the notice of Erasmus, when he was in England. He had observed them both at Cambridge and in London; and particularly mentions *the blowing of horns*, and the ceremony of depositing a deer's head upon the altar of St. Paul's church, which was built upon the site of a temple of Diana, by Ethelbert, king of Kent, in the time of *Melitus*, first bishop of London, as appears from a manuscript in the Cottonian collection. "*Apud Anglos*," says Erasmus, '*mos est Londini, ut certo die populus in summum templum Paulo sacrum inducat longo hostili impositum caput feræ, cum inamæno sonitu CORNUUM VENATORIORUM. Hac pompâ proceditur ud summum altare, dicas omnes afflatos furore Delicæ.*"'

For an account of some antient ceremonies on May-day, see our last volume, pp. 129-131.

1.—SAINT PHILIP AND SAINT JAMES THE LESS.

Philip was born at Bethsaida, near the sea of Tiberias, the city of Andrew and Peter. He was one of the first disciples, and an apostle. James the Less, called also *James the Just*, and, by the apostle Paul, *James*, the Lord's brother, was the son of Joseph, afterwards husband to the Virgin Mary, as is probable by his first wife. The first of these martyrs was stoned to death, and the second, having been thrown from a high place, was killed by a fuller's staff.

3.—INVENTION OF THE CROSS.

The Romish church celebrates this day as a festival, to commemorate the *invention* or finding of a

wooden cross, supposed to be the true one, by Helena, the mother of Constantine the Great.

A recent traveller to the Holy Land, speaking of *Calvary*, says, 'Here we were shown the place where Christ was nailed to the cross, where the cross was erected, and the hole into which the end of it was fixed, and the rent in the rock; all of which are covered with marble, perforated in the proper places, so that the ancient recipient of the cross and the rent in the rock may be seen and touched. Close by a cross is erected on an elevated part of the floor, and a wooden body stretched upon it in an attitude of suffering. Descending from Mount Calvary, we entered into the chapel of St. Helena, and went down into the low rocky vault in which the cross was found: in this murky den the discovery of the cross is celebrated by an appropriate mass every year on the 3d of May; it is large enough to contain about thirty or forty persons wedged in close array, and, on that occasion, it is generally crowded to the door. This year it happened that the day on which the festival was to be celebrated by the Romans, interfered with that on which it was to be celebrated by the Greeks, and we witnessed all the tag of war, the biting and the scratching, the pommeling and the pelting, the brick-bats and clubs, the whimpering and the mewling, of ecstatic, palpitating monks, fighting for their chapel like kites and crows for their nests. All are lost that miss. The Romans are routed: "The devil aids the Greeks, and they are schismatics," said the panting superior, swooning from a blow that might have cleft him in twain; "and you Englishmen, you live in our convent, and you see us beat, back and side, and you don't assist us." "How can you expect it?" rejoined a gallant Briton, "when, if we fell in your cause, you would not allow us a Christian burial." "Humph!" said the Roman, and called for the apothecary to rub his back with the balsam of Jerusalem, that had been well basted with the

blows of the cudgel, and undulated with bumps that rose like tubercles on the sides of a burning mountain. Coffee and Rosoglio consoled him for his defeat, and he whined himself asleep on that night as he had done on other nights before.

'The fathers of the Roman Catholic convent regularly go through the ceremony of the crucifixion every year. A statue intended to represent our Saviour is nailed to the cross; the pilgrims are all called upon in succession to advance and kiss it. The cross is then erected, and the image is allowed to remain upon it for a given time; it is then taken down from the cross, when the nails are withdrawn from the hands and feet, kissed, and carefully laid by, to be sold to the deluded votaries, and carried away to work miracles in a distant quarter of the globe. The bloody image is then wrapt in a linen cloth, and carried down to the stone of unction, where it is anointed, powdered, and spiced, and bound up and laid in the tomb, in which it remains till the morning of the third day. At each stage of the ceremony the fathers sing a hymn, preach a sermon, or both, as may be deemed most suitable to the occasion.'—(*Dr. Richardson's Travels*, vol. ii, p. 325.)

4.—ROGATION SUNDAY.

This day take its name from the Latin term *rogare*, to ask; because, on the three subsequent days, *supplications* were appointed by Mamertus, Bishop of Vienna, in the year 469, to be offered up with fasting to God, to avert some particular calamities that threatened his diocese.

6.—JOHN EVANGELIST, A. P. L.

John the Evangelist, so called from the Greek term *Εὐάγγελος*, the messenger of glad tidings, was a Galilean by birth, the son of Zebedee and Salome, the younger brother of James, but not of him that was surnamed the Just, and who was the brother of our Lord. His brother James and he were surnamed

by Jesus, the *Sons of Thunder*, meaning the principal ministers of the gospel, and John was more endeared to him than any of his disciples. He was condemned to be thrown into a cask of burning oil, Ante Port. Lat., before the gate of Latina; hence the letters added to his name. He lived to the reign of Trajan, and died about ninety years of age.

As a pleasing illustration of this day, we shall quote a most beautiful passage in EUSEBIUS, which relates the ecclesiastical tradition concerning the events of St. John's visit to Ephesus, after he had been set free from the confinement at Patmos, in consequence of the death of Domitian, and the toleration extended by Nerva, on his succession to the throne. We believe there is no reason to doubt the accuracy of this tradition; but if invention it be, surely it is one of the most touching and beautiful of inventions. The apostle, we are told, was one day engaged in a solemn ordination of ministers to serve in the church of Ephesus, when, looking round, his eye rested on, and was detained by the extraordinary loveliness and apparent innocence of the countenance of a certain youth who stood in the midst of the congregation. Turning to the bishop on whom he had just laid his hands, he exclaimed, 'In the presence of the church, and in the sight of Christ, I commit this young man to your utmost diligence.' The presbyter received the charge, and, in obedience to it, admitted the youth into his own family, where he was baptized, instructed, and reared up to manhood with all manner of kind and christian superintendence. In process of time, however, he became acquainted with a set of dissolute youths, who make it their whole business to exercise upon him every instrument of temptation—and, at last, he falls. One degree of vicious indulgence succeeds to another; until, at length, as the ecclesiastical historian has finally said, 'he, like a spirited and unbridled charger, galloping from the right path, and champing his reins, is

hurried, by the very nobility of his soul, more deeply into the abyss.' The end of his wicked course is, that he retires to Mount Taurus, with a number of the wild young men who had corrupted him, and, being elected their captain on account of his superior bravery, holds the whole region in terror by the boldness of his depredations.

A few years having elapsed, the old apostle returns to Ephesus, and, after transacting all public business of the church, turns suddenly round to the bishop, saying, 'Now, O bishop, restore to me the deposit which Christ and I, in the sight of this people, committed to thy care.' The bishop understands him not at first; but being asked in more explicit terms concerning the young man, rends his garments, and tells the story of his perversion, as it had happened. The aged apostle immediately inquired in what part of the mountain the young man lay with his band. Being provided with a guide, he penetrates the defiles of Taurus till he approaches the region infested by them. His guide then leaves him; but John advances, having determined to see the captain of the band. The old man is captured by some of the robbers, and is soon carried into the presence of their chief. We shall give the result in the words of Eusebius himself.

'The leader, armed as he was, awaited his arrival; and when he recognized John advancing towards him, overpowered with shame, he betook himself to flight. But the apostle, forgetful of his age, eagerly pursued him, exclaiming, "Wherefore do you fly from me? oh, my son! from your father, aged and unarmed? Pity me, oh, my child, and fear me not: you still possess a hope of salvation. I will make atonement for you to Christ. Willingly would I endure death on your behalf, even as the Lord died for me. I will give my own life as a ransom for you: stop, and believe: Christ hath sent me." The youth hearing these words, at first stood still, with his eyes

fixed upon the ground : next he threw off his arms, and, trembling, burst into a flood of tears. He then met the old man advancing, and with bitter sighs and lamentations implored his pardon, being, as it were, baptized a second time in his tears, only concealing his right hand. Then the apostle, pledging his faith, and swearing that he would obtain pardon for him from his Redeemer, having fallen on his knees and prayed, kissed the right hand of the young man as if it had been purified by repentance, and led him back to the church. Having besought God on his behalf with many prayers, and striving together by frequent fastings, and soothing his soul by many scriptural exhortations, the apostle, as they say, did not depart till he had restored him to the church, having afforded a signal example of sincere penitence, an illustrious instance of regeneration, and a trophy of a conspicuous resurrection.'

Upon this tradition, Mr. Dale, of Bene't College, Cambridge, has founded his beautiful poem of the '*Outlaw of Taurus*.' Part of the energetic address of St. John, at the close of the poem, we quote as a specimen of the author's powerful genius. The outlaw has already sealed his repentance, and received, at the hands of the apostle, the most precious of its earthly rewards, in the shape of the heroine of the poem, by name Irene. St. John speaks—

'But what are earth's vain fleeting charms
To that bright blest eternity
Which waits—O favoured maid—for thee?
The very thought my bosom warms,
As when in rocky Patmos lone
I communed with the HOLIEST ONE;
And o'er my head dread thunders broke,
And thus the viewless seraph spoke :—
"Mortal! from earth awake! arise!
And view the secrets of the skies."
Hearken, my children—and behold
The glories of the latter day;

When heaven its portals shall unfold,
 And earth and skies shall pass away.
 It is the ETERNAL SIRE's decree,
 That thus the final hour should be—
 Pomp—glory—grandeur shall decay,
 But his high word endure for aye.

One foot on earth, and one on sea,
 A mighty angel towers to heaven ;
 Before his glance the mountains flee ;
 Beneath his tread the depths are riven—
 Wreathed radiant round his brows divine
 The bright hues of the rainbow shine ;
 His aspect—like the broad red glare
 Of the fierce sun's meridian ray,
 Beams forth intolerable day—

The glory of the LORD is there.
 Loud as the maddening lion's roar,
 Or as the wild surge beats the shore,
 He speaks—blue lightnings rend the sky,
 And heaven in thunder gives reply.
 Ne'er be those sounds, in mystery sealed,
 To human ear on earth revealed.

And when that fearful sign was given,
 He raised his dread right hand to heaven,

And thus the oath he swore :—

“Ye spacious skies, thou rooted earth,
 By HIM who called you into birth
 Your destined date is o'er ;

I swear by HIM, whose sovereign sway
 The bright angelic hosts obey,
 By HIM who died, and lives for aye,
 That time shall be no more.”

Earth trembled at the sound, but, oh !

What shrieks of wailing and of woe,
 What frantic yells of wild despair,
 Tumultuous rend the troubled air ;

In vain, the day of grace is o'er,
 And love and pity plead no more.

Mark, where the rock-hewn cavern breaks,
 And to his doom th' oppressor wakes ;

Mark, where the fear-struck despot now
 Dashes the diadem from his brow ;

Beneath his foot the firm earth rends ;

The heavens are darkening o'er him ;

The JUDGE, the SOVEREIGN JUDGE, descends—

And who may stand before him ?

8.—ASCENSION DAY.

From the earliest times, this day was set apart to commemorate our Saviour's ascension into heaven : all processions on this and the preceding rogation days were abolished at the Reformation. Dr. Richardson, whom we have before quoted, gives us an interesting description of the '*Mount of Olives*,' whence our Saviour ascended into heaven. 'From Gethsemane' (observes this intelligent traveller) 'we wound our way up the Mount of Olives, which is a beautiful round table-shaped hill, covered with verdure and crops of grain, with a sprinkling of olive trees in different places. About half way up the hill is a ruined monastery, built on the place where our Saviour wept over Jerusalem. From this point the spectator enjoys, perhaps, the best view of the Holy City, and the three hills on which it stood are distinctly seen. The Harám Schereeff, and mosque of the Sakhara, appear to particular advantage; and it would be difficult to conceive any thing in the form of a building more light and beautiful. On reaching the summit of the hill, the eye commands a delightful view of the surrounding country; extensive, however, only towards the east, on which side it embraces part of the Dead Sea and the river Jordan. There is a small village on the top of the mountain, and tolerably good crops of barley growing all round it. It is not relatively high, and the summit is not above two miles distant from Jerusalem, and would more properly be called a hill than a mountain. This was the frequent resort of our Saviour and his disciples, and every spot around is teeming with interest and scenes that eloquently speak to the heart; but that which imperiously calls away the mind from all the others, is on the highest point of the *Mount of Olives*, the place where our Saviour, blessing his disciples, was taken up into heaven. What a dreadful separation,—Christ and his disciples! No parting on earth was ever like unto this. They who enjoyed his vi-

sible presence, and heard the heavenly instruction that flowed from his lips, could best describe their bereavement; but they were stunned and speechless: and who shall attempt to take up the theme? It is like the interruption of the divine intercourse in Paradise, the greatest privation that ever was sustained by man. Yet how unlike! The separation in Paradise left wrath and tribulation, and the curse of a broken law, and man ashamed to show his face under the weight of his offence, and the alarming conviction that the same God would annihilate the guilty race who, by their sins, had occasioned the hiding of his countenance; but the separation on the Mount of Olives left peace and blessing, and the promises of consolation—a restoration of the intercourse with God, since Christ had healed up the breach by which they were divided. The eyes of the Apostles gaze up into heaven; the eye of the body is speedily obscured in a heavenly pursuit: but for the spirit of the Christian in this line of vision there is no vanishing point; it shoots along the tract with its ascending Saviour, enters in his presence the mansions of the blessed, and appears, for the first time since the fall, in the presence of a reconciled God. This was an ecstasy not soon to be recovered from; the spirit enjoyed it, but the flesh was unconscious. The Apostles stood gazing up into heaven, till two of its messengers, in white apparel, recalled their spirits to the scene of their terrestrial operations. “*Ye men of Galilee, why stand ye gazing up into heaven? This same Jesus which is taken up from you into heaven, shall so come in like manner as ye have seen him go into heaven.*” He shall not come as the avenging God that planted the flaming sword to keep the way of the tree of life in Paradise, but as a reconciled and a blessing God; for he was taken up into heaven in the act of bestowing his blessing, and in like manner, we are assured, he is to return. Such heavenly strains did not fall ineffectual; the Apostles worshipped their

God and Saviour, and returned to Jerusalem with great joy.'—(*Travels*, vol. ii, p. 365.)

*11. 1822.—ABBÉ SICARD DIED, *ÆT.* 80,

The philanthropic and celebrated director of the interesting institution of the Deaf and Dumb at Paris, and the worthy successor of the Abbé de l'Epée. It was upon the model of his school that almost all similar institutions were formed; and the exercises of his pupils were objects of curiosity with all foreigners on their arrival in Paris. At one of these public examinations, a pupil being asked to define his idea of *red*, immediately answered that it resembled the *sound of a trumpet*; a curious coincidence with the answer of blind Sanderson, who, being required to describe the sound of a trumpet, compared it to the colour red. At another public examination the following question was put to a pupil of the Abbé Sicard, which would have puzzled any one to have resolved in five words, though he had had the perfect use of his ears and his tongue, and yet it was answered with great quickness by one that had neither:—'What is gratitude?'—'The memory of the heart.'

*13. 1822.—JAMES BASIRE DIED, *ÆT.* 52,

Engraver to the Royal and Antiquarian Societies, for whom he executed some most splendid works, particularly the English Cathedrals, after the drawings of Mr. John Carter, F.S.A. The numerous plates illustrative of the highly valuable collection of PARLIAMENTARY REPORTS in *fifteen volumes*, which have been in course of publication for several years past, and are now completed, were engraved by Mr. BASIRE. In naming these perennial monuments of the good taste and good sense of the nation, it were an injustice to an honourable man, and an intelligent and enterprising printer, not to mention their splendid and accurate *typography*; far distant be the time, however, when we shall have to register his name in our mortuary calendar! *Servus in cœlum redeat!*

18.—WHIT-SUNDAY..

On Whit-Sunday, or *White-Sunday*, the *catechumens*, who were then baptized, as well as those who had been baptized before at Easter, appeared, in the antient church, in *white garments*. The celebration of divine service in St. Peter's church at Rome, on Whit-Sunday, is described in T.T. for 1815, p. 165.

19.—WHIT-MONDAY.

This day and Whit-Tuesday are observed as festivals, for the same reason as Monday and Tuesday in Easter. Their religious character, however, is almost obsolete, and they are now kept as holidays, in which the lower classes still pursue their favourite diversions. For an account of the Eton *Montem*, see T. T. for 1815, p. 168. The Whitsun Ales and other customs formerly observed at this season, are noticed in T.T. for 1814, pp. 119-120.

19.—SAINT DUNSTAN.

Dunstan was promoted to the see of Worcester by King Edgar; he was afterwards Bishop of London, and Archbishop of Canterbury. He died in 988, in the 64th year of his age, and in the 27th of his archiepiscopal dignity. His miracles are too commonly known to be repeated.

21, 23, 24.—EMBER DAYS.—See p. 43.

25.—TRINITY SUNDAY.

Stephen, Bishop of Liege, first drew up an office in commemoration of the Holy Trinity, about the year 920; but the festival was not formally admitted into the Romish church till the fourteenth century, under the pontificate of John XXII.—See T.T. for 1820, p. 135; and '*The Scripture Doctrine of the Trinity briefly stated and defended*,' by the Rev. T. H. Horne, M.A., author of an '*Introduction to the Critical Study and Knowledge of the Holy Scriptures*;' of which last work a *third edition* has lately been published, greatly improved and enlarged, in four thick volumes octavo.

26.—AUGUSTIN, or AUSTIN.

This *English apostle*, as he is termed, was commissioned by Pope Gregory the Great to convert the Saxons. He was created Archbishop of Canterbury in 556, and died about the year 610.—See a fuller account of him in T.T. for 1815, p. 174.

27.—VENERABLE BEDE.

Bede was born at Yarrow in Northumberland, in 673. His grand work is the Ecclesiastical History of the Saxons. Bede has obtained the title of *Venerable*, for his profound learning and unaffected piety. Mr. WORDSWORTH, in his 'Sonnets and Memorials,' recently published, has paid an elegant tribute to the memory of BEDE. Having described the 'primitive Saxon clergy,' their entire devotion to religious duties, and their secluded life, the poet thus beautifully continues his sonnetal chain 'of linked sweetness long drawn out:—

Methinks that to some vacant hermitage
 My feet would rather turn—to some dry nook
 Scooped out of living rock, and near a brook
 Hurled down a mountain-cove from stage to stage,
 Yet tempering, for my sight, its bustling rage
 In the soft heav'n of a translucent pool;
 Thence creeping under forest arches cool,
 Fit haunt of shapes whose glorious equipage
 Perchance would throng my dreams. A beechen bowl,
 A maple dish, my furniture should be;
 Crisp, yellow leaves my bed; the hooting owl
 My night-watch: nor should e'er the crested fowl
 From thorp or vill his matins sound for me,
 Tired of the world and all its industry.

But what if one, through grove or flow'ry mead,
 Indulging thus at will the creeping feet
 Of a voluptuous indolence, should meet
 The hov'ring shade of VENERABLE BEDE;
 The saint, the scholar, from a circle freed
 Of toil stupendous, in a hallowed seat
 Of learning, where he heard the billows beat
 On a wild coast—rough monitors to feed

Perpetual industry. Sublime recluse!
 The recreant soul, that dares to shun the debt
 Imposed on human kind, must first forget
 Thy diligence, thy unrelaxing use
 Of a long life: and, in the hour of death,
 The last dear service of thy passing breath¹!

29.—CORPUS CHRISTI.

This festival, 'the body of Christ,' was appointed in honour of the Eucharist, and always falls on the Thursday after Trinity Sunday. It is called the *Fête Dieu*, or Corpus Christi, and is one of the most remarkable festivals of the Romish church, beginning on Trinity Sunday, and ending on the Sunday following.—See T.T. for 1818, p. 117.

29.—KING CHARLES II RESTORED.

On the 8th of May, 1660, Charles II was *proclaimed* in London and Westminster, and afterwards throughout his dominions, with great joy and universal acclamations.—See T.T. for 1815, p. 176; for 1820, p. 137; and for 1821, pp. 108-110.

*31. 1821.—OLIVER CROMWELL DIED, ÆT. 79,

The last lineal descendant of the celebrated Protector; being the great grandson of Henry Cromwell, Lord-deputy of Ireland, who was the fourth son of the Protector. He has left a daughter, *Elizabeth Oliveria*, married to T. A. Russel, Esq. of Cheshunt, not long before his decease. Mr. C. published 'Memoirs of the Protector, Oliver Cromwell, and his Sons Richard and Henry,' illustrated by Original Letters and other family Papers, with six portraits, in quarto; and since reprinted in two vols. 8vo. Another (collateral) descendant, Mr. Thomas Cromwell, has just published a *second edition* of his '*Oliver Cromwell and his Times*,' which steers a middle course between the prejudiced representations of Hume, and the panegyric of Mr. Oliver Cromwell. Mr. Thomas C.

¹ He expired in the act of concluding a translation of St. John's Gospel.

exhibits very considerable research in his attempt to ascertain the Protector's real character ; and is fully entitled to the praise of candour in his representations and fidelity in his statements.

As a fair specimen of his book, we give the following excellent summary of the character of Cromwell :—‘ He was a compound of such virtues and vices, of qualities so various and so opposed, that a mind and powers exactly similar to his own were alone perhaps capable of literally developing his career. Religious to the last, in his private and domestic conduct, he accustomed himself to the practice of a greater or less degree of dissimulation throughout his public life. Enthusiastic to a high degree in the cause he had espoused, he yet calculated consequences one by one, as they occurred, with almost unfailing exactness. So simple were his language and manners, that he appeared incapable of disguising a purpose that had arisen in his mind ; yet by penetration and address the most exquisite, did he at the same time so read the hearts, and so accommodate himself to the humours, of all with whom he associated, as at once to make them his firm friends, and footstools to his future elevation over them. His existence became a perpetual harlequinade : his expressions shifting from the spiritual to the coarsely jocular ; his conduct, from the pliant to the overbearing ; from the submissive to the most vehement contradictions and the boldest opposition. He could be gentle, almost to effeminacy ; or rude, almost to brutality : the *protector* of an insect, or a savage presiding at a human massacre ! He was found to have faculties, tempers, tastes, nay even apparent habits, adapted to all seasons and occasions. Hence he could pursue an object by the most concealed and devious tracks, or pounce upon it, like the eagle, by a single flight and stoop : he could charm away impediments from his path, or shiver them to fragments at a blow : he could enter

with an equal zest into the occupations of preaching, fighting, and reigning; was equally at home in the prayer-meeting, the camp, and the palace: and, as hitherto he had *brewed*, and *farmed*, with all a tradesman's tact for the arts of business and acquiring wealth, he now bestrode his war-horse with a grace entirely chivalric, and vaulted from the saddle but to sit the throne with an ease that made royalty seem a portion of his nature. Meanwhile, in every change of time and circumstance, religion, be it once again peculiarly observed, far from contracting, enlarged her hold upon his *feelings*, but gradually deserting his *judgment*, while her sphere of influence was lamentably abridged. In fact, the success that attended all his undertakings taught his enthusiasm so greatly to extend it in idea, that, finally, his every action appeared to him directed by an heavenly guidance, and his very crimes the offspring of a decreed necessity, or instruments to execute upon earth God's righteous vengeance!—See T.T. for 1817, p. 257, for a character of Cromwell, by Mr. Noble.

Astronomical Occurrences

In MAY 1823.

SOLAR PHENOMENA.

THE Sun enters Gemini at 39 m. after 10 in the evening of this month. He also rises and sets, during the same period, as in the following

TABLE

Of the Sun's Rising and Setting for every fifth Day.

May 1st, Sun rises 38 m. after 4.	Sets 22 m. after 7
6th, 29 4	31 7
11th, 22 4	38 7
16th, 13 4	47 7
21st, 7 4	53 7
26th, 1 4	59 7
31st, 52 3	8 8

M

Equation of Time.

A good sun-dial affords a ready means of regulating a clock, and, for this purpose, the following numbers must be subtracted from the time as given by the dial, and the remainders will be the corresponding times that should be shown by the clock.

TABLE

Of the Equation of Time for every fifth Day.

	m.	s.
Thursday, May 1st, from the time by the dial subtract	3	1
Tuesday, 6th,	3	35
Sunday, 11th,	3	53
Friday, 16th,	3	57
Wednesday, ... 21st,	3	48
Monday, 26th,	3	25
Saturday, 31st,	2	50

LUNAR PHENOMENA.

Phases of the Moon:

Last Quarter, 3d day, at 48 m. after	9 in the morning.
New Moon, 10th . . . 13 . . .	4 in the afternoon.
First Quarter, 17th . . . 32 . . .	7 in the morning.
Full Moon, 24th . . . 7 . . .	9 in the evening.

*Moon's Passage over the Meridian.**

The transits of the celestial bodies over the meridian of a place are among the easiest of astronomical observations, when the instrument is correctly fixed; and, as exercises for the young observer, the following times of the Moon's passing the meridian may be pointed out:—

May 2d, at 26 m. past	5 in the morning
3d, .. 12	6
4th, ... 56	6
5th, ... 39	7
6th, ... 23	8
17th, ... 37	6 in the evening
18th, ... 23	7
19th, ... 8	8
20th, ... 52	8
21st, ... 38	9
22d, ... 24	10
23d, ... 12	11

PHENOMENA PLANETARUM.

Phases of Venus.

Venus still continues to decrease in the breadth of her illuminated disk, but to increase in her apparent brightness, in consequence of her approaching the earth.

May 1st, { Illuminated part = 40.17046 digits
Dark part = 1.82954

Eclipses of Jupiter's Satellites.

The proximity of Jupiter at this time to the Sun, renders most of the eclipses of his satellites invisible; and there will only be one of the second satellite seen this month, and none of the first. This will take place at 27 m. 10 s. after 8 in the evening of the 6th.

TABLE
Of the Transits and Meridional Altitudes of the Planets.

	1st	7th	13th	19th	25th
	TRANSITS.				
	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
Mercury	0 10 <i>aft.</i>	0 38	1 4	1 25	1 37
Venus	2 6 <i>aft.</i>	2 14	2 22	2 30	2 37
Mars	11 27 <i>mor.</i>	11 21	11 17	11 10	11 4
Jupiter	2 1 <i>aft.</i>	1 44	1 26	1 8	0 50
Saturn	0 13 <i>aft.</i>	11 54 <i>mor.</i>	11 34	11 13	10 52
G. Sidus	4 20 <i>mor.</i>	3 57	3 32	3 0	2 38
	MERIDIONAL ALTITUDES.				
Mercury	54° 19'	58° 49'	62° 0'	63° 41'	64° 3'
Venus	61 48	62 52	63 31	63 46	63 35
Mars	50 19	51 54	53 22	54 45	56 2
Jupiter	59 59	60 11	60 22	60 33	60 43
Saturn	52 14	52 28	52 41	52 55	53 8
G. Sidus	15 10	15 10	15 9	15 9	15 8

Other Phenomena.

These will neither be numerous nor much varied this month. In those that do happen, the Moon will be the chief agent. Saturn, however, will be in quadrature at 5 in the afternoon of the 4th, and Mercury will obtain his greatest elongation on the 29th. The Moon will be in conjunction with this planet at 24 m. past 4 in the afternoon of the 11th; with Venus, at 5 m. after 2 in the morning of the 13th; with α in

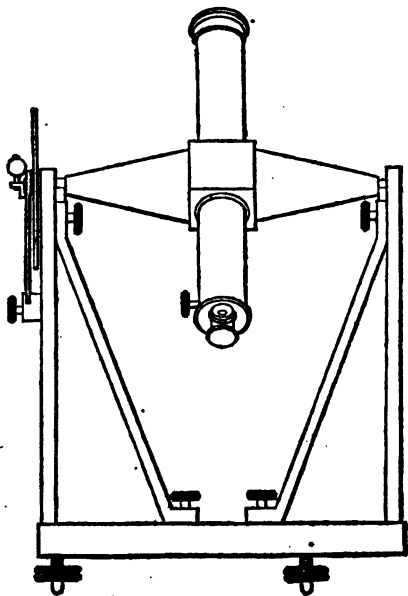
Scorpio, at 6 in the morning of the 25th; and with Georgium Sidus, at 38 m. after 1 in the morning of the 28th.

DESCRIPTION AND USE OF ASTRONOMICAL INSTRUMENTS.

[Continued from p. 101.]

THE TRANSIT INSTRUMENT.

These instruments were originally made so as only to be fixed in regular observatories; but many of a portable kind have now been constructed, which may be used in any place for ascertaining the rate of a clock or chronometer, and also for determining right ascension, when correctly placed in the meri-



dian. One of the most convenient of this portable construction is represented by the above figure, and is one of the numerous inventions of that excellent artist, Mr. Troughton.

In this instrument, the telescope is 20 inches long, its aperture $1\frac{1}{2}$ inch, and the magnifying power from 20 to 35, according to the eye-piece that is employed, which is sufficient for observing the pole star in the daytime. A thick brass ring forms the base of the instrument, and has three strong and equidistant screws for feet. The two vertical frames, that support the axis, are also fixed to this base by screws, and kept perpendicular by bracing bars, which are attached by screws to the base and upright frames respectively. The base being circular, it is not only firm in its support, but preserves its figure in all degrees of temperature, which is an essential quality in such instruments. As the inner diameter of this ring and the length of the axis are each a foot, and the height of the supports about 13 inches, when the screws are taken out, the whole packs up into a small box, and is very portable. The graduated circle (the edge of which is seen on the left) is six inches in diameter, and admits of reading to minutes, by each of two opposite verniers, which is sufficient for finding the meridian altitude of any celestial body whose declination is known, and the latitude of the place of observation given; or for finding the latitude, to the nearest minute, from an observed altitude. It was not, however, the inventor's object to adapt it particularly for taking altitudes, and he therefore limited himself to such properties as were requisite for constituting a useful and portable transit instrument.

The level belonging to this instrument is detached, and is equal in length to the axis upon which it is to be placed when used, and has notches in its end-pieces for this purpose. By this means the level is reversed without inconvenience; but it must be removed when the observations are made, to prevent its being displaced and broken by the elevation or depression of the telescope. There are also studs

of brass with conical holes in them for receiving the points of the screws, which serve as feet to the instrument: these are made fast in the stone or marble slab upon which the whole apparatus usually rests. Besides these, there are also darkened glasses, lantern, and other minor appendages, which are requisite for completing the use of the instrument under all circumstances. Several other portable instruments of this kind have also been made by other artists; among these, one with cast iron frames, by Mr. Jones, of Charing Cross, may be mentioned; which, having 30 and 42 inch telescopes, has greater power than the one above described, and is cheaper in proportion to its size.

The adjustment of the various parts of this instrument require some explanation:—It is the business of the instrument-maker to adjust the level, but this may be easily tried by placing it on the axis of the telescope, and then, if the bubble rise to one end, that must be lowered either by turning the proper screw, if there be one, or by deepening the notch, till the bubble is brought to the middle; then, if the level be reversed, and the bubble still remain in the middle, the adjustment is complete, or the level is parallel to the axis of the telescope; if not, the same means must be repeated for bringing it to that position. It is to be remarked, however, that in the detached level, when the notches which rest upon the pivots of the telescope are properly made, they will seldom require a second rectification. The very same operation will also serve for bringing the axis of the telescope into its proper horizontal position; for when the level is placed upon the pivots, and the bubble brought to the middle by turning the proper screw, if it still remain in that position when the ends of the level are reversed, the axis will be horizontal. When the previous adjustment of the level can be depended upon, it will be sufficient to bring

the bubble to the middle without reversing the level, for then the axis upon which it rests will evidently be horizontal.

The telescope itself likewise requires some attention in its adjustment, or in making the foci of the eye and object-glasses coincide, and then bringing the wires to this common point. Some telescopes have the object-glass fixed, while the eye-glass and wires are moveable; and others have the wires fixed, and the two glasses moveable; a different mode of adjustment is consequently requisite for each. In the first case, the eye-piece must be slid in or out till the object appears perfectly distinct. Then the wires being also moved backwards or forwards till they also appear distinct, the telescope will be fit for use. The mode of adjustment in the second case, is by moving the eye-glass till the wires acquire their greatest clearness, and then changing the position of the object-glass till the object also assumes its maximum brightness, when the telescope will be perfectly adjusted. This adjustment is of great importance in making accurate observations, and the following is an easy method of trying its correctness. Bring the horizontal wire to bisect a star very correctly as it passes the meridian, and it will then appear to run along the wire. If the eye be moved a little upwards or downwards while the star is passing the field of view, and it does not appear to quit the wire, the reticule is correctly placed; if it does leave the horizontal wire, the proper screw must be turned till it does not.

Another important adjustment is, that of bringing the instrument into the plane of the meridian. To accomplish this, take several altitudes of the Sun near the meridian, noting the respective times by a watch or clock; and from these find the apparent time, the latitude of the place and the Sun's declination being known. The difference between this time and the mean of those given by the clock or

watch will be what the watch is too slow or too fast, in reference to apparent time. When the watch is too fast, add the difference to 12 hours; but when it is too slow, subtract it from 12 hours, and the sum or remainder will be the time when the Sun's centre will pass the meridian, as nearly as the exactness of the watch can be depended upon. Then the Sun's semidiameter (taken from the Nautical Almanac for the given day) added to, and subtracted from, this time, will give the two moments when his eastern and western limbs will be on the meridian. A short time before the Sun's western limb will reach the meridian, let a person count the seconds, and name the minutes aloud by the clock as they pass; and while he is doing this, bring the Sun within the field of view of the instrument, by elevating it to the required altitude, and turning the whole instrument round on the proper screw, until the middle wire is west of the Sun's western limb. As the telescope inverts the image, it will then necessarily appear to be on the eastern side of the eastern limb. The screw then being tightened, when the Sun's nearest limb arrives at the wire, keep it on it by turning the instrument at the same rate as the Sun moves, till he who counts the seconds arrives at the instant when this limb of the Sun should pass the meridian; and the instrument will then be nearly in its proper position. The counting of the seconds should still proceed till the moment when, according to the calculation, the eastern limb should be upon the meridian, which affords another opportunity of correcting the position of the instrument, if it does not exactly coincide with the central wire at the time calculated.

Having thus brought the instrument either into, or very near, the meridian, its real situation may be verified by several methods. One of the most convenient, if the latitude be sufficient, is by means of circumpolar stars. When the latitude exceeds 25

or 90 degrees, there are several stars which are sufficiently bright and never set, and which may consequently be observed when on the meridian both above and below the pole. The transit in both these positions being correctly observed, it is obvious that, if the time between the upper and lower transit be exactly equal to that between the lower and upper, the instrument will be exactly in the meridian; but if the former of these periods be greater than the latter, the telescope points to the east of the true meridian; but if the latter be the greater interval, it is west of it, and must be adjusted accordingly; for which a repetition of the observation may be necessary.

When its meridional position is thus correctly ascertained, place a mark as distant from the telescope as circumstances will permit, and adjust it, by this mark, previously to every observation.

The Naturalist's Diary

For MAY 1823.

What though the dome be wanting, whose proud walls
A thousand lamps irradiate, propt sublime
By frolic forms of youths in massy gold,
Flinging their splendours o'er the midnight feast?
Though gold and silver blaze not o'er the board,
Nor music echo round the gaudy roof?
Yet listless laid the velvet grass along
Near gliding streams, by shadowy trees o'erarched,
Such pomps we need not; such still less when SPRING
Leads forth her laughing train, and the warm year
Paints the green meads with roseate flowers profuse.

LUCRETIVS, by Good, L. ii, v. 14.

How delightful is the opening of May, bringing with it the most delicious sensations, overflowing with sweets, and infusing through all nature a freshness and vitality perceived at no other period of the year! Summer may possess attractions of a more flaunting character, and Autumn may proffer its matured fruits and wealthy harvests; but to those who

have a keen perception of natural beauty, and a sympathy with the vivid impressions which Spring produces on the mind, what can be more grateful than the renovated appearance of nature, and the elasticity and exhilaration of feeling experienced at the beginning of this month of fruition, pregnant as it is with light, pleasure, and loveliness? The clouds, no longer black, and hurried across the face of heaven by storms, are like fleeces of snowy whiteness enamelled upon the eternal azure, setting off and not sullyng the purity of its serene hue. The soft breezes,

Zephyr with Aurora playing,
bear 'buxon health' and joyousness on their wings.
The birds sing their sweetest notes.

The insect youth are on the wing,
Eager to taste the honied spring,
And float amid the liquid noon.

The early flowers, 'the yellow cowslip and the pale primrose,' decorate the surface of the earth. The verdure, rich in colour, refreshed by frequent showers, and not yet imbrowned by the summer sun, may be contemplated in all its variety of tinge. Creation seems to have arisen from the dead; all is being—instinct with life and motion. Love also awakes at this genial season, as Cunningham pleasantly sings:

From the west as it wantonly blows,
Fond Zephyr caresses the vine;
The bee steals a kiss from the rose,
And willows and woodbines entwine:
The pinks by the rivulet side,
That border the vernal alcove,
Bend downward to kiss the soft side;
For MAY is the mother of Love.

MAY tinges the butterfly's wing,
He flutters in bridal array;
And if the winged foresters sing,
The music is taught them by MAY.

The stock-dove, recluse with her mate,
 Conceals her fond bliss in the grove,
 And, murmuring, seems to repeat,—
 ‘That MAY is the mother of Love.’

To all conversant with the writings of the poets, striking descriptions of the seasons must be familiar. No piece by the hand of Guido or the Caracci exceeds the following group of allegorical personages, as drawn by that master poet LUCRETIVS :

SPRING comes and VENUS, and with foot advanced,
 Then light-winged ZEPHYR, harbinger beloved;
 Maternal FLORA, strewing ere she treads,
 O'er ev'ry footstep, flowers of choicest hue,
 And the glad ether loading with perfumes:
 Then HEAT succeeds, the parched ERSIAN breeze,
 And dust-discoloured CERES; AUTUMN then
 Follows, and tipsy BACCHUS, arm in arm,
 And STORMS and TEMPESTS; EURUS roars amain,
 And the red SOUTH brews thunders; till, at length,
 COLD shuts the scene, and WINTER's train prevails,
 SNOWS, hoary SLEEP, and FROST, with chattering teeth.

MASON GOOD.

Milton makes the most heavenly clime to consist of an ‘eternal spring:’—

The birds their quire apply; airs, vernal airs,
 Breathing the smell of field and grove, attune
 The trembling leaves, while universal Pan,
 Knit with the graces and the hours in dance,
 Led on the eternal spring.

Virgil, in his second Georgic, places the cosmogony in the spring:—

Such were the days, the season was the same,
 When first arose this world's all-beauteous frame;
 The sky was cloudless, balmy was the air,
 And spring's mild influence made all nature fair.

WARTON, *Geo. L. ii, v. 407.*

And again, the Mantuan bard, in his first Georgic, exquisitely describes the season of spring: this we shall give in the beautiful version of Mr. SOTHEY:—

Birds on their branches hymeneals sing,
 The pastured meads with bridal echoes ring;
 Bathed in soft dew, and fanned by western winds,
 Each field its bosom to the gale unbinds;

The blade dares boldly rise, new suns beneath,
 The tender vine puts forth her flexile wreath,
 And, freed from southern blast and northern shower,
 Spreads without fear, each blossom, leaf, and flower.

GEORG. I, L. ii. v. 329.

Honest Chaucer, between four and five hundred years ago, speaks of the spring as we speak of it now, for the revolutions of time effect no change in natural sensations. Hear his beautiful lines in the 'Romaunt of the Rose':—

That it was MAY thus dreamid me,
 In time of love and jolité,
 That al thing ginneth waxen gay,
 For there is neither buske nor hay
 In May that it n'ill shroudid bene,
 And that it with newè levis wrene;
 These woddis eke recoveren grene
 That drie in winter ben to sene,
 And the erth waxith proude withal
 For sote dewis that on it fall,
 And the povir estate forgette
 In whiche that winter had it sette,
 And then becometh the grounde so proude
 That it wol have a newè shronde,
 And make so queint his robe and sayre,
 That it had news an hundred payre
 Of grape and flouris Inde and Pers,
 And many newis full divers,
 That is the robe I mene iwis
 Through whiche the ground to praisin is.

But it would be an interminable task to quote the beautiful apostrophes which have been addressed to this regal division of the year; we will only give another extract from a Turkish address to the season:—

'Thou hearest the tale of the nightingale, "that the vernal season approaches." The spring has spread a bower of joy in every grove, where the almond-tree sheds its silver blossoms. Be cheerful; be full of mirth; for the spring passes soon away, it will not last.

'The groves and hills are adorned with all sorts of flowers: a pavilion of roses, as the seat of pleasure, is raised in the garden. Who knows which of us will be alive when the fair season ends? Be cheerful, &c.

‘The edge of the bower is filled with the light of Ahmed; among the plants the fortunate tulip represents his companions. Come, O people of Mohammed! this is the season of merriment. Be cheerful, &c.’

Such is the description of May by the poets, and such its character really is, in a greater or less degree, to all who enjoy youth and health’. In some temperaments, however, the impression produced by the season is overpowering from excess of excitation, and a feeling of sadness is generated amidst gaiety and hope. Burke observes, that the passion of love has in it more of melancholy than of jollity or mirth; and it is the same with impressions made by natural objects, where these impressions are more than commonly deep. They always tend, during the highest enjoyment of them, to a pleasing melancholy. The scent of a flower, where the perception of its odour is more exquisite than usual, will do this; and the view of an unclouded evening sky, or a rich setting sun, is uniformly productive of sadness to persons of great sensibility, and even in a limited degree to others. We are seldom aware of the cause of this; but it will often take its departure from the mind, leaving a feeling of mingled admiration and devotion be-

* We take this opportunity of recurring to our old friend ROBERT BLOOMFIELD, whose *Farmer's Boy* will not fail to give delight so long as the beauties of external nature continue to have any effect on the human mind. *Perpetual ill-health* and concomitant anxieties have prevented him, of late years, from devoting much time to poetry: his ‘*May Day with the Muses*,’ however, affords sufficient proof that he still takes an occasional draught from the fountain of Helicon. Speaking of his lately published poems, he says, ‘I have written these tales in anxiety and in a wretched state of health; and if these formidable foes have not incapacitated me, but left me free to meet the public eye with any degree of credit, that degree of credit I am sure I shall gain.’ These sufferings, however, have not incapacitated the poet for pleasing those who are disposed to be pleased with *wild flowers and May-blossom*, and such simple things as go to form a May-day wreath; and he must be a ruthless and a heartless critic who would by rough handling doom them to fade a moment before their time.

hind'. This perhaps arises from an unconscious regret, that all we are looking at is but for a short time; that the majesty of this 'breathing world' will not be much longer for us; and we feel forcibly, though hardly conscious of it, the instability of our being. Who that is arrived at manhood can forget his youthful feelings in May?—who can forget

The spot where spring its earliest visit paid?

Such reminiscences are the food of after-life, and enlighten with a solitary ray of sunshine even the gloom of the grave into which age is tottering. But the majority of mankind have fibres too coarse to vibrate to such impressions, and May is their month of boisterous rapture and unreflecting joy. Even care corrodes the heart less during the reign of this queen of months, for it is then that the tide of being flows to its full height. And why should it not be so?—

Hard his herte that loveth nought
In Mey, when al this mirth is wrought².

The latest species of the summer birds of passage arrive about the beginning of May. Among these are the goatsucker, or fern-owl (*caprimulgus Europæus*), the spotted fly-catcher (*muscipapa grisola*), and the sedge-bird (*motacilla salicaria*). In this and the following month, the *dotterel* is in season. Some birds that are in general strangers to England, occasionally visit its shores and groves. The most remarkable among these are the *little peterel*, the

¹ This particular kind of feeling may be understood by the following passage:—'Combien de fois, de ma fenêtre exposée au Nord, j'ai contemplé avec émotion les vastes déserts du ciel, sa voûte superbe, azurée, magnifiquement dessinée, depuis le levant bleuâtre, loin derrière le Pont-au-Change, jusqu'au couchant, dorée d'une brillante couleur aurore derrière les arbres du cours et les maisons de Chaillot! Je ne manquois pas d'employer ainsi quelques momens à la fin d'un beau jour, et souvent des larmes douces couloient silencieusement de mes yeux ravis, tandis que mon cœur, goulé d'un sentiment inexprimable, heureux d'être et reconnoissant d'exister, offroit à l'Etre supreme un hommage pur et digne de lui.'—*Vie privée de Mad. Roland*.

² See New Monthly Magazine, vol iv, p. 428, N.S.

hoopoe, the *green woodpecker*, and the *golden-crowned wren*.—See our last volume, p. 155.

Our Gloucestershire correspondent remarks, that nearly the whole race of our migrating birds have been remarkably scarce this year (1822), and a very indifferent observer must have noted the small number of hirundines that have been seen sporting about our pools and villages; and most of the other summer visitors have been equally rare, but have not been so manifest to general observation as these more familiar birds. The *wry-neck* (*jynx torquilla*) has been scarcely heard in the spring, and our ant-hills, where they commonly feed in July and August, exhibit hardly any symptoms of their depredations. The *fly-catcher* (*muscipapa grisola*) has appeared only here and there; and that amusing perseverance in capturing their prey, which in most summers is exhibited in our gardens and courts, has this year been confined to the lonely ruin, or a few favourite sites: and even the *strong-winged swift* (*h. apus*) collected for his dashing flight around our church towers but a poor assemblage of companions. The only wandering bird we have observed, that has visited us this year in his usual number, is the *ash-coloured butcher bird* (*lanius excubitor*.) It is probable that the migrating birds in their passage to us encountered some adverse gales, and, exhausted by a long and weary flight, were unable to contend with them, and perished in the ocean. But notwithstanding the diminished number of these little creatures, the rapacity of them has been almost unequalled. *Motacilla atricapilla*, *m. sylva*, *m. hippolais*, and *m. hortensis*, have been most bold and voracious plunderers of our gardens, as, from the dryness of the season, it is probable they found but little food beyond the precincts of our inclosures. From the mildness of our winter in 1821-2, and the forwardness of the spring, birds began to breed unusually early, and the whole business of nidification and the employ-

ment of rearing their young were finished nearly a month earlier than in common years; and at the end of July and August, the season partook the character, and birds the plumage of September.

We have recorded a competition between the nightingale and a lutanist in our last vol. p. 118-122; we have now to mention a trial of skill between Philomel and a Cuckoo, which lasted the whole of the night, and until four o'clock in the morning, when the nightingale gave up the contest. We mention this on the authority of 'an adorer of singing birds and spring,' whose communication on the subject will be found in the *Examiner*, May 6, 1822, accompanied by the following pretty lines:—

On hearing a Duet at Midnight between the Cuckoo and the Nightingale to celebrate the Return of Spring, May 1, 1822.

'Twas May-day night,—the clock struck 'leven,

But who could go to rest?

The silver Moon was bright in heaven,

And music charmed the breast;

Music that's oft in Spring-time heard,

To Nature's children dear,

When Nature's favourite minstrel-bird

Trills wildly in the ear.

The Cuckoo on a neighbouring tree

Felt jealous of her pow'rs;

'And since you sing so well,' said he,

'For once I'll try *late hours*.'

Then cuckoo, cuckoo, cuckoo sang,

With voice of human gladness;

All round the dewy meadows rang,

That not to hear—were madness.

The Bird of Spring perhaps was proud

To join the Bird of Summer;

Just then,—good Heav'n!—how sweet, how loud,

The silvery notes leapt from her!

And all her trills were exquisite,—

So deep, so soft, so pearly,—

She must have drank the beams of light,

To make her sing so clearly.

The village slept, the world was still,
The grass with dew-drops glistened ;
But there were other hearts to thrill,—
The hearts of those that listened.

Among them was the ' Child of Song,'
Who May-day's beauties numbered ;
By all, these feathered poets long
Will make May-night remembered.

Birds are now building their nests, or laying their eggs, and their whole deportment seems altered. Little mindful of themselves at other times, they now appear as anxious parents, or wary architects; watching an intruder near their haunts with suspicion, the operation of building is suspended, and even the food for their young ones withheld; or they steal to their nests through obscure passages, or by threading or winding a way amidst the neighbouring bushes. The markings or colouring of eggs are often very variable even in the same species and nest; those with one colour, most generally retain it with only shades of distinction; but when there are blotchings or spots, they vary so much, even in the same nest, that no permanent character can be given of them: those of the house-sparrow vary as much from each other, as any bird we possess. The eggs of marine birds are particularly liable to these variations; those of the guillemot (*colymbus troile*) are very remarkably unlike each other. That these speckings and colourings are to answer some design, we must conclude, because they always preserve something like a distinction through ages; and though their marks do not form a permanent character, yet the shadings of one species never wander to confound another. The plumage varies but little, and probably is the same at this hour as it originally was. The egg of the cuckoo is perhaps the smallest laid by any bird of its size, not being larger than that of a lark; and thus the little bird in whose nest it is deposited has no suspicion of the intrusion, but hatches it in conjunction with her own.

The insect tribe continue to add to their numbers ; among these may be named several kinds of moths and butterflies (*papilio atalanta*, *cardamines*, *ageria*, *lathonia*, &c.)

A few butterflies that have passed the inclement season in the chrysalis state, are seen on the wing, early in May ; soon after which the female lays her eggs singly on the leaves of nettles.—Consult T.T. for 1821, p. 153.

Other insects now observed, are field crickets (*gryllus campestris*), the chaffer or may-bug (*scarabæus melolontha*), and the forest-fly (*hippobosca equina*), which so much annoys horses and cattle. The female wasp (*vespa vulgaris*) appears at the latter end of the month. Nothing can afford greater amusement than to watch the members of this industrious community in their daily journies from flower to flower.—See T.T. for 1821, pp. 155, 156, for a poetical catalogue of the flowers and plants from which bees extract their honey, with illustrative notes.

This is the season of *beauty* in the garden ; every thing in nature is young and fresh, what Gray calls ‘ Nature’s tenderest, freshest, green.’ The blowing of the *lilacs* and *laburnums* may be said to be the glory of the garden and the shrubbery, delighting both the sight and the smell.

Soft tints of sweet May-morn,—when day’s bright god
Looks smiling from behind delicious mists ;
Throwing his slant rays on the glistening grass,
Where ’gainst the rich deep green the cowslip hangs
His elegant bells of purest gold :—the pale
Sweet perfumed *primrose* lifts its face to heaven
Like the full, artless gaze of infancy :—
The little ray-crowned *daisy* peeps beneath,
When the tall neighbour grass, heavy with dew,
Bows down its head beneath the fresh’ning breeze ;
Where oft in long dark lines the waving trees
Throw their soft shadows on the sunny fields ;
Where, in the music-breathing hedge, the thorn
And pearly white *May-blossom*, full of sweets,

Hang out the virgin flag of Spring, entwined
 With dripping *honeysuckles*, whose sweet breath
 Sinks to the heart—recalling, with a sigh,
 Dim recollected feelings of the days
 Of youth and early love.

Atherstone's Last Days of Herculaneum.

About the commencement of the month, the flowers of the lily of the valley (*convallaria maialis*) and the flowers of the chesnut tree (*fagus castanea*) begin to open; the tulip tree (*liriodendron tulipifera*) has its leaves quite out, and the flowers of the Scotch fir, the honeysuckle, the beech, and the oak, are in full bloom.

So thine oak by some fair streamlet's side
 Waves its broad arms, and spreads its leafy pride;
 Tow'rs from the earth, and, rearing to the skies
 Its conscious strength, the tempest's wrath defies:
 Its ample branches shield the fowls of air,
 To its cool shades the panting herds repair.
 The treach'rous current works its noiseless way,—
 The fibres loosen, and its roots decay;
 Prostrate the beauteous ruin lies; and all
 That shared its shelter, perish in its fall.

The *whitethorn*, or hawthorn (*crataegus oxyantha*), emphatically called *May*, is expected to be in flower on the 1st of this month, but it is only so in very forward seasons. There are different kinds of it, the *white* and the *pink*, growing in small bunches all along the slender twigs, or rods, of the tree or bush, which form, with the bright green and jagged leaves, some of the most beautiful wreaths that the country can boast.

The HAWTHORN.

On summer's breast the hawthorn shines
 In all the lily's bloom,
 Mid slopes where th' evening flock reels,
 Where glows the golden broom,
 When yellow autumn decks the plain,
 The hawthorn's boughs are green,
 Amid the ripening fields of grain
 In emerald brightness seen.

A night of frost, a day of wind,
 Have stript the forest bare :
 The hawthorn too that blast shall find,
 Nor shall that spoiling spare.
 But red with fruit, that hawthorn bough,
 Tho' leafless, yet will shine ;
 The blackbird far its hues shall know,
 As lapwing knows the vine.
 Be thus thy youth as lilies gay,
 Thy manhood vigorous green ;
 And thus let fruit bedeck thy spray
 Mid age's leafless scene.

The mulberry-tree (*morus nigra*) puts forth its leaves. As this tree is in leaf in England generally after the silk-worm is hatched, the difficulty of obtaining it as food for this animal in the spring is evident.—See some novel information on this subject under the article SILK WORM, in *Mr. Jennings's Family Cyclopædia*.

The garden now affords rhubarb, green apricots, and green gooseberries, for making pies and tarts.

The orchis (*orchis mascula*) will now be found in moist pastures, distinguished by its broad black spotted leaves, and spike of large purple flowers ; it frequently grows in patches of several yards square. Its roots afford the highly nutritious substance, the *salep* of the shops. The walnut (*juglans regia*) has its flowers in full bloom.

The banks of rills and shaded hedges are ornamented with the pretty tribe of speedwells, particularly the germander speedwell (*veronica chamaedrys*), the field mouse-ear (*myosotis arvensis*), the dove's-foot crane's-bill (*geranium molle*), and the red campion (*lychnis dioica*) : the first two of azure blue, and the last two of rose colour, intermixing their flowers with attractive variety.

The lilac (*syringa vulgaris*), the barberry (*berberis vulgaris*), and the maple (*acer campestre*), are now in flower. At the latter end of the month, rye (*secale hybernium*) is in ear ; the mountain ash (*sorbus aucu-*

paria), laburnum (*cytiscus laburnum*), the guelder rose (*viburnum opulus*), clover (*trifolium pratense*), columbines (*aquilegia vulgaris*), with their singular and fantastic nectaries, the alder (*rhamnus frangula*), the wild chervil (*chærophyllicum temulum*), and the wayfaring tree, or wild guelder-rose, have their flowers full blown. The various species of meadow grass are now in flower. The buttercup (*ranunculus bulbosus*) spreads over the meadows; the cole-seed (*brassica napus*) in corn-fields, bryony (*brionia dioica*), the arum, or cuckoo-pint, in hedges, the Tartarian honeysuckle (*lonicera tartarica*), and the *corchorus Japonica*, now show their flowers. The flowers of the garden rose begin to open.

The ROSE BUD.

From the German of Goëthe.

A Rose, that bloomed the road-side by,
Caught a young vagrant's wanton eye;
The child was gay, the morn was clear,
The child would see the rose-bud near:
He saw the blooming flow'r.
My little rose, my rose-bud dear!
My rose that blooms the road-side near!
The child exclaimed, ' My hands shall dare,
Thee, rose, from off thy stem to tear !'
The rose replied, ' If I have need,
My thorns shall make thy fingers bleed—
'Thy rash design give o'er.'
My little rose, my rose-bud dear!
My rose that blooms the road-side near!
Regardless of its thorny spray,
The child would tear the rose away;
The rose bewailed with sob and sigh,
But all in vain—no help was nigh
To quell the urchin's pow'r.
My little rose, my rose-bud dear!
My rose that bloomed the road-side near !

The amateurs of *tulips* are now rewarded for all their care and pains, by the splendid show this flower

¹ New Monthly Magazine, October 1822, p. 309.

makes, when seen in beds, exhibiting the richest and most beautiful colours that the imagination can picture. Unless carefully guarded, however, against the uncertainty of our climate, the hopes and expectations of the cultivator will be greatly disappointed. To this subject the poet sweetly alludes in the following elegant comparison :—

As some fair tulip by a storm oppress,
Shrinks up and folds its silken arms to rest,
And, bending to the blast, all pale and dead,
Hears, from within, the wind sing round its head;
So shrouded up your beauty disappears :
Unveil, my love, and lay aside your fears ;
The storm that caused your fright is past and done.

DRYDEN.

Towards the end of spring all our *birds of prey* are very active and bold ; their food becomes scarce, and, to satisfy their hunger, they incur risks which they avoid at other seasons : watching the dove-cot, they will seize the birds at the very doors of their asylums. The common sparrow-hawk takes his prey by different methods : at one time he glides along the hedge in the utmost silence, and, with unmoving wing, rushing on his victim the moment he sees it, with undeviating certainty. At other times he singles out his object from some eminence whereon he is perched ; or, when on the wing, not always moving on in a direct line, but sailing above, he drops on his prey with a rapidity that insures a capture. The devoted creature makes no exertion to escape, but sees his enemy advance in motionless terror, and becomes an unresisting victim : so fixed is the attention of the hawk upon this one object, that he seems unmindful of his own danger, and, rushing by on precipitate wing, he snatches up his morsel at our very sides. Some wary bird generally gives the alarm of danger, and, in a moment, the little troop hurry away to the adjoining hedge ; but most commonly the evil is too near for the victim he has singled out to escape.

The female glow-worm (*lampyris noctiluca*) is now seen on dry banks, about woods, pastures, and hedge-ways.

The *marine* plants which flower this month, and which are chiefly found on sea-shores and in the crevices of rocks, are, buck's horn (*plantago coronopus*), which flowers the whole summer; burnet saxifrage (*pimpinella dioica*), sea arrow-grass (*triglochin. maritimum*) on muddy shores; the clammy lychnis (*lychnis viscaria*); the cerastium-tetrandum; scurvy-grass (*cochlearia*), sea-kale (*crambe maritima*), on sandy shores; the sea-cabbage (*brassica oleracea*), the sea-stork's bill (*erodium maritimum*), the slender bird's-foot trefoil (*lotus diffusus*), the mountain flea-wort (*cineraria integrifolia*) on chalky cliffs; and the sedge (*carex arenaria*) on sea shores.

The leafing of trees is usually completed in May. —See T. T. for 1818, p. 132; and T. T. for 1817, p. 155, for some lines on *planting trees*.

This is the season in which cheese is made: the counties most celebrated for this article are Cheshire, Wiltshire, and Gloucestershire.

The corn is benefited by a cold and windy May, and is too apt to run into stalk, if the progress of vegetation be much accelerated by warm weather at this season. In late years, some sowing remains to be done; and, in forward ones, the weeds should be well kept under.

JUNE.

Remarkable Days

In JUNE 1823.

1.—NICOMEDE.

NICOMEDE was a pupil of St. Peter, and was discovered to be a Christian by his burying Felicula,

a martyr, in a very honourable manner. He was beaten to death with leaden plummetts, on account of his religion, in the reign of Domitian.

5.—SAINT BONIFACE.

Boniface was a Saxon presbyter, born in England, and at first called Winfrid. He was sent as a missionary, by Pope Gregory II, into Germany, where he made so many converts, that he was distinguished by the title of the *German Apostle*. He was created Bishop of Mentz in the year 145. Boniface was one of the first priests of his day, and was also a great friend and admirer of the Venerable Bede. He was murdered in a barbarous manner by the populace near Utrecht, while preaching the Christian religion.

*JUNE.—1536.—DISSOLUTION OF MONASTERIES and Destruction of Libraries by Henry VIII.—It is a circumstance well known to every one at all conversant in English history, that the suppression of the lesser monasteries by that rapacious monarch, Harry the VIII, took place in 1536. Bishop Fisher, when the abolition was first proposed in the convocation, strenuously opposed it, and told his brethren that this was fairly showing the king how he might come at the great monasteries. ‘And so, my lords,’ concluded he, ‘if you grant the king these smaller monasteries, you do but make him a handle, whereby he may cut down all the cedars within your lebanons.’ Fisher’s fears were borne out by the subsequent acts of Henry, who, after quelling a civil commotion occasioned by the suppression of the lesser monasteries, immediately abolished the remainder; and, in the whole, suppressed 645 monasteries, of which 28 had abbots who enjoyed seats in parliament. Ninety colleges were demolished, 2374 chantries and free-chapels, and 110 hospitals. The havoc that was made among the libraries cannot be better described than in the words of Bayle, Bishop of Ossory, in the preface to Leland’s ‘New Year’s Gift to King Henry VIII:’—

'A greate nombre of them whyche purchased those superstycyouse mansyons (*monasteries*) reserved of those librarye bookes, for various purposes, some to scoure theyr candlestyckes, some to rubbe theyr bootes, &c. &c. Some they solde to the grossers and sope sellers, and some they sent over see to y^e booke bynders, not in small nombre, but at tymes whole shyppes full to y^e wonderynge of foren nacyons. Yea y^e Universytees of thys realme are not alle clere in thys detestable fact. But cursed is that bellye whyche seketh to be fedde with suche ungodlye gaynes, and so depelye shameth hys natural contere. I knowe a merchant manne, whyche shall at thys time be namelesse, that boughte y^e contentes of two noble lybraryes for forty shyllinges pryce: a shame it is to be spoken. Thys stuffe hathe he occupied in y^e stede of greye paper, by y^e space of more than these ten yeares, and yet he hathe store ynoughe for as manye yeares to come. A prodygyouse example is thys, and to be abhorred of all men whyche love theyr nacyon as they shoulde do. The monkes kepte them undre duste, y^e ydle-headed prestes regarded them not, theyr latter owners have most shamefully abused them, and y^e covetouse marchantes have solde them awaye into foren nacyons for moneye.'

On the '*dissolution of the monasteries*,' Mr. Wordsworth has written a series of most beautiful *Sonnets*, three of which we are tempted to present to our readers, as conveying sentiments (perfectly in unison with our own), and clothed in language worthy of the pen from which it flows:—

I.

Threats come which no submission may assuage;
 No sacrifice avert, no power dispute;
 The tapers shall be quenched, the belfries mute,
 And, 'mid their choirs unroofed by selfish rage,
 The warbling wren shall find a leafy cage;
 The gadding bramble hang her purple fruit;
 And the green lizard and the gilded newt
 Lead unmolested lives, and die of age.

The owl of evening, and the woodland fox,
For their abodes the shrines of *Waltham* choose ;
Proud *Glastenbury* can no more refuse
To stoop her head before these desperate shocks—
She whose high pomp displaced, as story tells,
Arimathean Joseph's wattled cells.

II.

The lovely nun (submissive but more meek
Through saintly habit, than from effort due
To unrelenting mandates that pursue
With equal wrath the steps of strong and weak)
Goes forth—unveiling timidly her cheek,
Suffused with blushes of celestial hue,
While through the convent gate to open view
Softly she glides, another home to seek.
Not Iris, issuing from her cloudy shrine,
An apparition more divinely bright !
Not more attractive to the dazzled sight
Those wat'ry glories, on the stormy brine
Poured forth, while summer suns at distance shine,
And the green vales lie hushed in sober light.

III.

Yet some, noviciates of the cloistral shade,
Or chained by vows, with undissembled glee
The warrant hail—exulting to be free ;
Like ships before whose keels, full long embayed
In polar ice, propitious winds have made
Unlooked-for outlet to an open sea,
Their liquid world, for bold discovery,
In all her quarters temptingly displayed.
Hope guides the young ; but when the *old* must pass
The threshold, whither shall they turn to find
The hospitality—the alms (alas !
Alms may be needed) which that house bestowed ?
Can they, in faith and worship, train the mind
To keep this new and questionable road ?

11.—SAINT BARNABAS.

Our saint's proper name was *Joses* ; he was descended of the tribe of *Levi*, and born at *Cyprus*. His parents being rich, had him educated at *Jerusalem*, under the care of *Gamaliel*, a learned Jew ; and, after his conversion, he preached the Gospel with *Paul*, in various countries, for fourteen years. *Barnabas* suffered martyrdom at *Salamis*, in his native island:—being shut up all night in the synagogue by some Jews, he was, the next morning, cruelly tortured, and afterwards stoned to death. The *Epistle*

which he wrote is considered genuine, though not admitted into the canon of the church.

17.—SAINT ALBAN.

St. Alban, the first Christian martyr in this island, suffered in 303. He was converted to Christianity by Amphialus, a priest of Caerleon in Monmouthshire, who, flying from persecution, was hospitably entertained by St. Alban at Verulam, in Hertfordshire, now called, from him, St. Alban's. Amphialus being closely pursued, made his escape, dressed in St. Alban's clothes. This, however, being soon discovered, exposed St. Alban to the fury of the Pagans; and our saint refusing to perform the sacrifice to their gods, was first miserably tortured, and then put to death.

*18. 1815.—BATTLE OF WATERLOO.

There was a sound of revelry by night,
And Belgium's capital had gathered then
Her beauty and her chivalry, and bright
The lamps shone o'er fair women and brave men:
A thousand hearts beat happily; and when
Music arose with its voluptuous swell,
Soft eyes looked love to eyes which spake again,
And all went merry as a marriage-bell:
But hush! hark! a deep sound strikes like a rising knell!

Did ye not hear it?—No; 'twas but the wind,
Or the car rattling o'er the stony street;
On with the dance! let joy be unconfined;
No sleep till morn, when youth and pleasure meet
To chase the glowing hours with flying feet—
But, hark!—that heavy sound breaks in once more,
As if the clouds its echo would repeat;
And nearer, nearer, deadlier than before!
Arm! arm! it is—it is—the cannon's opening roar!

Ah! then and there was hurrying to and fro,
And gathering tears, and tremblings of distress,
And cheeks all pale, which but an hour ago
Blushed at the praise of their own loveliness;
And there were sudden partings, such as press
The life from out young hearts, and choking sighs
Which ne'er might be repeated: who could guess
If ever more should meet those mutual eyes,
Since upon nights so sweet such awful morn could rise!

And there was mounting in hot haste: the steed,
 The mustering squadron, and the clattering car,
 Went pouring forward with impetuous speed,
 And swiftly forming in the ranks of war;
 And the deep thunder peal on peal afar;
 And near, the beat of the alarming drum
 Roused up the soldier ere the morning star;
 While thronged the citizens with terror dumb,
 Or whispering, with white lips—'The foe! they come! they come!'
 And wild, and high, the 'Cameron's gathering' rose!
 The war-note of Lochiel, which Albion's hills
 Have heard, and heard, too, have her Saxon foes:—
 How in the noon of night that pibroch thrills,
 Savage and shrill! but with the breath which fills
 Their mountain-pipe, so fill the mountaineers
 With the fierce native daring which instils
 The stirring memory of a thousand years,
 And Evan's, Donald's fame rings in each clansman's ears!
 And Ardennes waves above them her green leaves,
 Dewy with Nature's tear-drops, as they pass,
 Grieving, if aught inanimate e'er grieves,
 Over the unreturning brave,—alas!
 Ere evening to be trodden like the grass
 Which now beneath them, but above shall grow
 In its next verdure, when this fiery mass
 Of living valour, rolling on the foe
 And burning with high hope, shall moulder cold and low.
 Last noon beheld them full of lusty life,
 Last eve in Beauty's circle proudly gay;
 The midnight brought the signal sound of strife,
 The morn the marshalling in arms,—the day
 Battle's magnificently-stern array!
 The thunder-clouds close o'er it, which when rent
 The earth is covered thick with other clay,
 Which her own clay shall cover, heaped and pent,
 Rider and horse,—friend, foe,—in one red burial blent!

BYRON.

20.—TRANSLATION OF EDWARD, *King of the West Saxons.*

Edward being barbarously murdered by his mother-in-law, was first buried at Warham, without any solemnity; but, after three years, was carried by Duke Alferus to the minster of Shrewsbury, and there interred with great pomp.

21.—LONGEST DAY.

This day is, in London, 16 h. 34 m. 5 s., allowing 9 m. 16 s. for refraction.

TIME.

A Canzone from the Italian of Torquato Tasso.

'Donne voi che superbe.'

Dames that in the dawning glow
Of your youth and beauty go ;
Ye who, in your strength, defy
Love with all his archery ;
Ye who stand unconquered still,
Conquering others as ye will—
Ye shall bend, at last, before
The iron sceptre of my power.

Mine shall be your glories then,
Mine the triumphs of your train,
Mine the trophy and the crown,
Mine the hearts which ye have won ;
And your beauty's waning ray
Shall wax feeble, and decay,
And your souls too proudly soaring,
To see the prostrate world adoring.

TIME, imperial TIME, am I,
TIME, your lord and enemy ;
TIME, whose passing wing can blight,
With the shadow of its flight,
More than Love in all his pride,
With his thousands by his side.

While I speak, the moments fly,
And my spirit silently
Creeps into your sparkling eyes,
And amid your tresses lies—
Here the wreathed knots untwining,
There bedimming beauty's shining ;
Blunting all the piercing darts
Which the amorous eye imparts,
And wearing loveliness away
To crumble with its kindred clay.

On I fly ; I speed away,
On, for ever and for aye—
But, alas ! ye take no heed
To the swiftness of my speed,

Bearing, like a mighty river,
 In the downward course for ever,
 All your gay and glittering throng,
 Honours, titles, names along—
 Mortal hopes and mortal pride,
 With the stillness of its tide.

* *

Soon shall come that fatal hour
 When, beneath my arm of power,
 Lowly shall ye bend the knee.
 Soon shall Love the palace flee,
 Where he sits enthroned on high
 In the lustre of your eye;
 And your victor standard there
 Age and chill reserve shall rear.

* *

Soon, like captives, shall ye learn
 Ways less wild, and laws more stern;
 Gone shall be your smiling glances,
 Hushed your carols and your dances;
 And your golden robes of pride
 All, too soon, be laid aside
 For the vesture grey and sere,
 Which my humbled captives wear.

And I now proclaim your fate,
 That reflection ere too late,
 How, when youthful years are gone,
 Hoary ills come hasting on,
 Ye may stoop your pride of soul,
 Holding earth in strong controul,
 Deeming that the world contains
 None deserving of your chains.
 Bend ye, then, to Reason's sway,
 Go where Pity points the way;
 While with wing unflagging I
 Keep my course eternally.

Days and nights, and years, and ye,
 My swift winged family,
 Whom the All-creating Hand
 Framed ere earth itself was planned,—
 Up, and still untiring hold
 Your triumphant course of old,
 And still your rapid cars be driven
 O'er the boundless path of heaven!

New Monthly Magazine.

24.—SAINT JOHN THE BAPTIST and MIDSUMMER DAY.

The nativity of St. John the Baptist is celebrated by the Christian Church on this day, because he was the *Forerunner* of our blessed Lord, and, by preaching the doctrine of repentance, prepared the way for the gospel. He was imprisoned by Herod for preaching against his marriage with his brother's wife, and was afterwards beheaded by the arts of that enraged woman.

The morning of Midsummer Day is still regarded, in many parts of Europe, in something like the same light with our own Allhallows Eve, the Scottish observances and superstitions connected with which have been so beautifully treated by Burns in his *Halloween*. In some parts of Spain the young maidens go forth in the morning to gather flowers, singing a beautiful antient ballad, or invitation to their companions to join them in their annual ceremonies. —(See T. T. for 1821, p. 172.) According to a provincial custom in *Lower Saxony*, every young girl plucks a sprig of St. John's wort on Midsummer night, and sticks it into the wall of her chamber. Should it, owing to the dampness of the wall, retain its freshness and verdure, she may reckon upon gaining a suitor in the course of the year; but if it droop, the popular belief is, that she also is destined to pine and wither away.

On this superstition, we subjoin the following floating version of some lines transcribed from a German almanack.

THE ST. JOHN'S WORT.

The young maid stole thro' the cottage door,
And blushed as she sought the plant of power;
'Thou silver glow-worm; O lead me thy light;
I must gather the mystic St. John's wort to-night;
The wonderful herb, whose leaf will decide
If the coming year shall make me a bride.

And the glow-worm! cants:

With its silvery flames, I

The glow-worm is denominated in German *Johanniswürmchen*.

And sparkled and shone
Thro' the night of St. John,
And soon has the young maid her love-knot tied.

With noiseless tread
To her chamber she sped,
Where the spectral Moon her white beams shed :—
' Bloom here—bloom here, thou plant of pow'r,
To deck the young bride in her bridal hour !'
But it drooped its head that plant of pow'r,
And died the mute death of the voiceless flow'r ;
And a withered wreath on the ground it lay,
More meet for a burial than bridal day.

And when a year was passed away,
All pale on her bier the young maid lay !
And the glow-worm came
With its silvery flame,
And sparkled and shone
Thro' the night of St. John,
And they closed the cold grave o'er the maid's cold clay.

For an account of some strange customs observed in Yorkshire and Cornwall on Midsummer eve and day, the festival-fires and sacrificing of beasts, and the immolation of human victims in France, consult our last volume, pp. 169-173.

Midsummer-day is one of the quarter days on which rent *becomes payable*,—we cannot say *is paid*,—during the present great depression of agricultural produce, and the consequent inability of the farmer to discharge his obligations to his landlord. To all such proprietors of land as may be lovers of the wonders and curiosities of nature, we particularly recommend, at the present crisis, the practice of a worthy character mentioned in the *RAMBLER*, No. 82 : 'As Alfred received the tribute of the Welsh in wolves' heads, I allowed my tenants to pay their rents in *butterflies*, till I had exhausted the papilionaceous tribe. I then directed them to the pursuit of other animals ; and obtained, by this easy method, most of the grubs and insects which land, air, or water can supply. I have three species of earth-worms not known to naturalists ; have discovered a

new ephemera; and can show four wasps that were taken torpid in their winter quarters. I have, from my own ground, the largest blade of grass upon record; and once accepted, as a half year's rent for a field of wheat, *an ear* containing more grains than had been seen before upon a single stem. One of my tenants so much neglected his own interest, as to supply me, in a whole summer, with only two horse-flies, and those of little more than the common size; and I was on the brink of seizing for arrears, when his good fortune threw a *white mole* in his way, for which he was not only forgiven but rewarded.

29.—SAINT PETER.

Peter's original name, Simon, was not abolished by Christ, but that of *Cephas* was added to it, which in Syriac, the vulgar language of the Jews, signifies a stone or rock; hence the Greek Πέτρος, and our *Peter*. The apostle's father was Jonah, probably a fisherman of Bethsaida. His brother Andrew, being first converted, was said to be an instrument of Peter's conversion, *John* i, 40, 41. St. Peter lived at Capernaum: he was a married man, and his wife's mother lived with them. Christ seems to have frequently lodged or sojourned at his house.—See *Luke* iv, 31-38, and Bp. Hall's *Contemplation on the Tribute Money*.

Among the most brilliant spectacles ever witnessed in modern times, may be placed the splendid *illumination of St. Peter's Church*, and the magnificent *girandola*, or fire-works, from the Castle of St. Angelo, at Rome, annually exhibited on this day: the latter bear no resemblance to the squibs and crackers denominated fire-works in England; and threw at an immeasurable distance all our attempts at pyrotechny on the occasion of the last peace, or the late grand ceremonial of the coronation; as well as those of our neighbours the French, at their much vaunted *Fête of Saint Louis*. These illuminations and fire-works at Rome have been well described

by a modern writer before quoted in our account of the ceremonies of the Holy Week; and, as her interesting description would materially suffer by abridgment, we shall give the whole without mutilation. 'At Ave Maria (she observes) we drove to the piazza of St. Peter's. The lighting of the lanternoni, or large paper lanterns, each of which looks like a globe of ethereal fire, had been going on for an hour, and, by the time we arrived there, was nearly completed. As we passed the Ponte San Angelo, the appearance of this magnificent church, glowing in its own brightness—the millions of lights reflected in the calm waters of the Tiber, and mingling with the last golden glow of evening, so as to make the whole building seem covered with burnished gold, had a most striking and magical effect.

'Our progress was slow, being much impeded by the long line of carriages before us; but at length we arrived at the Piazza of St. Peter's, and took our station on the right of its farther extremity, so as to lose the deformity of the dark dingy Vatican Palace. The gathering shades of night rendered the illumination every moment more brilliant. The whole of this immense church—its columns, capitals, cornices, and pediments—the beautiful swell of the lofty dome, towering into heaven, the ribs converging into one point at top, surmounted by the lantern of the church, and crowned by the cross,—all were designed in lines of fire; and the vast sweep of the circling colonnades, in every rib, line, mould, cornice, and column, were resplendent in the same beautiful light.

'While we were gazing upon it, suddenly a bell chimed. On the cross of fire at the top waved a brilliant light, as if wielded by some celestial hand, and instantly ten thousand globes and stars of vivid fire seemed to roll spontaneously along the building, as if by magic; and, self-kindled, it blazed in a moment into one dazzling flood of glory. Fancy herself, in her most sportive mood, could scarcely have conceived so wonderful a spectacle as the in-

stantaneous illumination of this magnificent fabric: the agents by whom it was effected were unseen, and it seemed the work of enchantment. In the first instance, the illuminations had appeared to be complete, and one could not dream that thousands and tens of thousands of lamps were still to be illuminated. Their vivid blaze harmonized beautifully with the softer, milder light of the lanterns; while the brilliant glow of the whole illumination shed a rosy light upon the fountains, whose silver fall, and ever-playing showers, accorded well with the magic of the scene.

‘Viewed from the Trinità de’ Monti, its effect was unspeakably beautiful: it seemed to be an enchanted palace hung in the air, and called up by the wand of some invisible spirit. We did not, however, drive to the Trinità de’ Monti till after the exhibition of the girandola or great fire-works from the Castle of St. Angelo, which commenced by a tremendous explosion that represented the raging eruption of a volcano. Red sheets of fire seemed to blaze upwards into the glowing heavens, and then to pour down their liquid streams upon the earth. This was followed by an incessant and complicated display of every varied device that imagination could figure—one changing into another, and the beauty of the first effaced by that of the last. Hundreds of immense wheels turned round with a velocity that almost seemed as if demons were whirling them, letting fall thousands of hissing dragons, and scorpions, and fiery snakes, whose long convolutions, darting forward as far as the eye could reach in every direction, at length vanished into air. Fountains and jets of fire threw up their blazing cascades into the skies. The whole vault of heaven shone with the vivid fires, and seemed to receive into itself innumerable stars and suns, which, shooting up into it in brightness almost insufferable, vanished, like earth-born hopes. The reflection in the depth of the calm clear waters of

the Tiber was scarcely less beautiful than the spectacle itself; and the whole ended in a tremendous burst of fire, that, while it lasted, almost seemed to threaten conflagration to the world.

'The expense of the illumination of St. Peter's, and of the girandola, when repeated two successive evenings, as they invariably are at the festival of St. Peter, is 1000. crowns: when only exhibited one night, they cost 700.. Eighty men were employed in the instantaneous illuminations of the lamps, which to us seemed the work of enchantment: they were so posted as to be unseen.'—(*Rome in the Nineteenth Century*, vol. iii, pp. 169-173.)

Astronomical Occurrences

In JUNE 1823.

SOLAR PHENOMENA.

THE Sun enters Cancer at 10 m. after 7 in the morning of the 22d of this month.

Refulgent SUMMER now his hot domain
Hath carried to the tropic, and begins
His backward journey.

The Sun also rises and sets at this period of the year as in the following

TABLE
Of the Sun's Rising and Setting for every fifth Day.

June 1st, Sun rises	53 m. after 3.	Sets at	7 m. past 8
6th,	50	3.	10
11th,	46	3.	14
16th,	43	3.	17
21st,	43	3.	17
26th,	43	3.	17

Equation of Time.

As the motion of the earth in its orbit is not uniform, the time, as indicated by a good sun-dial and that given by a well-regulated clock, agrees only four times a year; therefore, to find the true time from the apparent, a correction must be used as indicated in the following

TABLE

Of the Equation of Time for every fifth Day.

Sunday.....	1st, from the time by the dial	<i>subtract</i>	^{m. s.} 2 42
Friday.....	6th,		1 53
Wednesday, 11th,			0 56
Monday.....	16th, to the time by the dial	<i>add</i>	0 6
Saturday....	21st,		1 10
Thursday...	26th,		3 14

LUNAR PHENOMENA.

Phases of the Moon.

Last Quarter,	2d day, at 22 m. past	1 in the morning
New Moon....	8th 48	11 at night
First Quarter	15th 23	3 in the afternoon
Full Moon....	23d 3	noon.

Moon's Passage over the Meridian.

The Moon will pass the meridian of the Royal Observatory at the following times during this month, which may afford opportunities for observing her in that position: the times refer to the passage of her centre over that circle.

June 2d, at 16 m. after	6 in the morning
3d, ... 58	6
4th, ... 43	7
17th, ... 32	7 in the evening
18th, ... 18	8
19th, ... 5	9
20th, ... 54	9
21st, ... 44	10
22d, ... 35	11

PHENOMENA PLANETARUM.

Phases of Venus.

June 1st, {	Illuminated part = 9.00453 digits
	Dark part..... = 2.99547

Eclipses of Jupiter's Satellites.

The eclipses of these small bodies are not visible this month, Jupiter being too near the Sun.

TABLE
Of the Meridional Transits and Altitudes of the Planets.

	1st	7th	13th	19th	25th
TRANSITS.					
	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
Mercury	1 39 <i>aft.</i>	1 29	1 6	0 33	11 56 <i>mor.</i>
Venus	2 44 <i>aft.</i>	2 50	2 54	2 57	3 0
Mars	10 56 <i>mor.</i>	10 49	10 42	10 35	10 29
Jupiter	0 29 <i>aft.</i>	0 10	11 52 <i>mor.</i>	11 32	11 13
Saturn	10 27 <i>mor.</i>	10 5	9 43	9 21	8 59
G. Sidus	2 15 <i>mor.</i>	1 50	1 24	0 58	0 32
ALTITUDES.					
	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
Mercury	63°16'	61°57'	60°21'	58°47'	57°37'
Venus	62 50	61 46	60 21	58 36	56 34
Mars	57 24	58 27	59 24	60 12	60 54
Jupiter	60 54	61 3	61 10	61 17	61 22
Saturn	53 22	53 34	53 45	53 56	54 5
G. Sidus	15 6	15 4	15 3	15 2	15 1

Other Phenomena.

Jupiter will be in conjunction at a quarter past 3 in the afternoon of the 10th of this month. Mercury will be stationary on the 11th. The Moon will be in conjunction with α , in Scorpio, at 1 m. after 12 on the 21st, and with Georgium Sidus at 50 m. past 5 in the morning of the 24th. Mercury will also be in his inferior conjunction at half past 2 on the same day.

DESCRIPTION AND USE OF ASTRONOMICAL INSTRUMENTS.

[Continued from p. 141.]

We shall now show the method of applying the observations made with this instrument to the correction of a clock or watch, which is one of the most useful as well as frequent of its applications. If the clock or watch to be regulated be designed to keep mean solar time, like those employed for the common purposes of life, when the instrument has been properly adjusted, observe the transit of the Sun, in the manner which has already been described, by taking the mean of all the times in which his eastern and western limbs pass the different wires. This

will be the moment of apparent noon, and which must be corrected, for the equation of time, as already explained in several parts of our work, by which it will be reduced to mean solar time, and give the moment which should be indicated by the clock at the same instant: it will thus be ascertained how much the clock is too fast or too slow. By repeating this observation the next day, and for several days in succession, and comparing the results with the moments indicated by the clock at the same time, the comparison will give the quantity which it gains or loses per day. If this be considerable, the pendulum must be lengthened or shortened by turning the proper screw, according as it gains or loses; but if the gain or loss in 24 hours be not more than one or two seconds, and either uniform, or very nearly so, for equal intervals of time, the pendulum may be allowed to remain, and the gain or loss in any given interval applied as a correction to the result obtained at a future time. As this observation requires a little dexterity in the observer to make it correctly, especially when he is unassisted by a second person, we shall explain the process more fully. The best method of observing the transit of any of the heavenly bodies, is first to watch it into the telescope, and then to note the hour, minute, and second by the clock, which is supposed to be placed near the instrument for the purpose of being readily observed; then, with your eye applied to the telescope, count the beats of the clock till the body passes the first wire, and note down the exact time of its transit. When this is done, observe the time by the clock again, and note the moment of its passage over the second wire, in the same manner as before; and so on, in succession, till it has passed all the wires; then, adding all these results together, and dividing by the number of them, will give the mean, which will be the instant of passing the central wire, and consequently that with which the time by the clock or watch is to be compared.

If the clock be adjusted to sidereal time (which is the most convenient for a regular observatory), that is, so as to register exactly 24 hours from one transit to another of any fixed star, observations on the stars are preferable to those of the Sun, as being attended with less reduction. In this case, the same star ought to pass the meridian at the same instant on each successive day; and the deviations from this, if any, will consequently be the gain or loss of the clock in a given time, and which must be corrected or allowed for as above described. Observations on the fixed stars may also be made in conjunction with a clock that is set to mean solar time; but then a slight computation is necessary for arriving at the true result: for, as the length of the sidereal day, when expressed in mean solar time, is only 23h.56m.41.1s., the clock ought only to show this period between the consecutive transits. It is consequently with this, and not with 24 hours, that the time of the transit is to be compared, and the gain or loss deduced accordingly.

This instrument may likewise be conveniently used for ascertaining the *Right Ascension* of the heavenly bodies, which is an arc of the equator comprised between the first point of Aries, or that where it is intersected by the ecliptic at the vernal equinox, and the point where a secondary to the equator, passing through the body, meets the latter circle. Now, as the motion of the earth on its axis, or the apparent motion of the heavens, is uniform, right ascension may be denoted by the interval of time that elapses between the moment that the first point of Aries passes the meridian, and that of the transit of the body. This astronomical quantity, therefore, admits of a double measure, that is, either in *degrees* or *time*, but the latter is the most usual, and this is generally registered in sidereal hours, minutes, and seconds: it is given in these for every day at noon in the Nautical Almanac. To ascertain the right ascension of any body, set the

clock to 0 h. at the moment the first point of Aries passes the meridian of the place of observation; then the clock being adjusted to correct sidereal time by the preceding observations, the hour indicated by the clock at the moment the body passes the meridian will be the right ascension required. If the clock does not show exact sidereal time, but has a regular daily deviation, this is called its *rate*, and must be added to the indicated hour, or subtracted from it, as the clock was too slow or too fast; and then the result will give the right ascension sought. Should the clock, however, not be so adjusted as to show 0 h. 0 m. 0 s. at the moment the first point of Aries passes the meridian, it is evident that the difference of the times will be the right ascension required. When the measure is required in degrees instead of time, it is easily obtained by saying, as 23 h. 56 m. 41 s. is to the time given by the clock, so is 15° to the measure required.

It should be remarked, however, for the information of our youthful readers, that what is called the first point of Aries is not a fixed point in the heavens, but changes its place by a slow retrograde motion, which is called the *Precession of the Equinoxes*: the right ascension of any given star is therefore not a constant quantity, but requires frequent corrections. Many of the fixed stars have had their right ascensions determined with great precision by astronomers, particularly 36 of them, which, with their annual variations, were ascertained by the late Astronomer Royal, Dr. Maskelyne, and are now chiefly used by astronomers for their observations of this kind. The apparent places of 24 principal stars, corrected for precession, aberration, and nutation, are also given for every 10th day of 1823, in the Nautical Almanac. Those places are determined by their right ascensions in time, and the north polar distances in degrees, minutes, and seconds.

The Naturalist's Diary

For JUNE 1823.

The *plant*, upspringing from the *seed*,
 Expands into a perfect *flow'r* ;
 The virgin-daughter of the mead,
 Wooed by the sun, the wind, the show'r ;
 In loveliness beyond compare,
 It toils not, spins not, knows no care,
 Trained by the secret hand that brings
 All beauty out of waste and rude,
 It blooms a season,—dies,—and flings
 Its germs abroad in solitude.

MONTGOMERY.

THE region of Flora, with its odours and endless hues, constitutes, in this month, one of our most pleasing and innocent recreations ; for, if the weather have been mild and favourable, the flower-garden is in all its glory at the commencement of June. Now there are flowers

Of pleasant odours all, and lustrous blowing,
 That do enrich the air on which they feed,
 And far around a light and fragrance spread.

Among these, the *rose*, the type of love and beauty, holds a pre-eminent rank ; and yet of this beautiful and delicate flower the number is often diminished by the attacks of insects ; for the *bud* is too frequently

Bit by an envious worm,
 Ere it can spread its sweet leaves to the air,
 Or dedicate its beauty to the Sun.

Now, like *care*, the caterpillar eats
 The leaves of the *spring's sweetest book*, the *rose*.

The *Austrian rose* blossoms in the early part of this month. Of tributes to the *rose* our volumes can boast an ample collection¹ ; but we may still add to the number.

¹ See particularly T. T. for 1822, pp. 184-186, for some beautiful lines on the rose by Hafez ; and an account of the delicious garden of Negauristan, which is filled with rose-trees of fourteen feet in height, laden with thousands of flowers, and whose groves resound with the enchanting melody of multitudes of nightingales.

Trembling fear

Plucks roses from her cheeks, which soon appear
Full blown again with anger ; red and white
Did, in this conflict of her passions, fight
For the pre-eminence.

Chamberlayne.

At ev'ry turn she made a little stand,
And thrust among the thorns her lily hand
To draw the rose ; and ev'ry rose she drew
She shook the stalk, and brushed away the dew.
Then party-coloured flow'rs of white and red
She wove, to make a garland for her head.

Palamon and Arcite.

Innumerable herbs and flowers embellish our gardens, gratify our sense of smell, and purify and renovate the atmosphere in the pleasant month of June. The fields of clover (*trifolium pratense*), which are now in blossom, produce a delightful fragrance. The sweet-scented vernal grass (*anthoxanthum odoratum*), which is the cause of the very delightful scent of hay, flowers in this month, and diffuses its fragrance through the country.

About the beginning of June, the pimpernel (*anagallis arvensis*), thyme (*thymus serpyllum*), the bitter sweet nightshade (*solanum dulcamara*), white bryony, the dog-rose (*rosa canina*), and the poppy¹ (*papaver somniferum*), have their flowers full blown. The milky juice of the poppy is the well-known and valuable *opium* of the shops, the soother of all our

¹ On the POPPY.

When life's red stream with quickened impulse flows,
Impetuous struggling through th' obstructed brain,
And hot as *Ætna's* burning lava glows,
When, wasting wide, it seeks the distant main ;
When Reason staggers with the stroke of Pain,
And Superstition's spectres hover round ;
While Frenzy sees red lightnings scathe the plain
That erst with Fancy's sweetest flow'rs was crowned ;
Where shall the harassed wretch for succour fly ?
Nor faith nor hope can now afford him aid ;
For Vengeance waves her flaming falchion high,
And o'er the grave hangs Horror's baleful shade !
Blest POPPY ! thou, surpassing ev'ry flow'r,
Afford'st a sov'reign balm for this distressing hour.

REV. J. BLACK.

aches and pains. The *single white* poppy produces the best opium : the seed affords an excellent oil for the table, equal to olive oil ; and the same seed is also, when eaten, considered of as good flavour as the hazel-nut kernel.—See our last volume, p. 183.

The fox-glove (*digitalis*), which produces a beautiful flower, blossoms in this month as well as in the next. It is found wild in various parts of England in great perfection, but is not to be met with, we believe, in a wild state near London.

The common white lily (*lilium candidum*) is now in flower. ‘ This splendid native of the Levant’ (observes our ingenious correspondent from the banks of the Severn) ‘ has been now naturalized in our gardens above two hundred years, and yet retains a place with the holly-hock, a Chinese beauty of still earlier introduction, about our farm-houses, and in the little borders of our more antient cottages ; but the Mexican fancy of the hour, the Dahlia, begins to intrude upon them, and perhaps may banish the “ ignobile vulgus” of an elder day. We cannot reasonably place any faith or dependence upon so mutable a circumstance as the blooming of a plant ; yet some of the Gloucestershire peasantry entertain an idea, that, from the favourable or unfavourable blossoming of the white lily, they can guess at the price, that year, of wheat per bushel. A season congenial to the growth of one plant may be detrimental to the increase of another, or the villagers may have noted an occasional occurrence, and made it a general criterion : however this may be, it is certain that, from the remarks of several years, there has been a very great irregularity in the number of blossoms produced from the spikes of this plant ; and in the years 1820, 21, and 22 (great wheat years), the paucity of its blossoms afforded no reason to apprehend the decay of a plant, which, in some preceding and unfavourable corn seasons, indicated health and luxuriance.’

To LILIES.

Where yonder *lilies* wanton with the air,
 And no autumnal blasts have blown to fade,
 If flow'rs thou seek'st, a festive wreath to braid,
 Bend thy search thither, thou wilt find them there ;
 Not in the arches of the forest, where
 The branching oaks extend unmoving shade ;
 Of Spring's minuter verdure disarrayed,
 The earth beyond their twisted roots is bare,
 Save where perchance the *hop*, with tendril curled,
 Or *ivy*, stringed, may seek and twine around
 Some stems amidst the forest chiefs that tower :
 So, in the mightier landscape of the world,
 The *flowers of joy and love* are seldom found
 At the stern feet of knowledge or of power.

Sixty-five Sonnets, &c.

The common jay (*corvus glandarius*) in this month frequents our gardens, and makes great havock in the bean-rows. This bird is remarkable for the beauty of the feathers forming the greater coverts of his wings : in the other parts of his body, the plumage is plain and sober, and his form heavy and inelegant. In general they are extremely wary, cautious birds ; but in this season, about which time their brood is fledged, their boldness is remarkable. Having once tasted of the garden beans, nothing seems to intimidate them, and they persevere in the indulgence of this luxury as long as one of the brood or any of the crop remains. A parent bird descends from a tree into the rows, and soon announces his discovery by a low but particular scream, and all the family hasten to the plunder : this over, they have no other inducement to frequent our dwellings ; the mother returns to the woods with all her chattering children, and becomes the same wild and cautious creature as before. Many of our birds separate early from their brood, as soon as they are able to provide for themselves ; but the jay and her family associate during all the autumn and winter months, and only depart to become founders of new establishments. They seem very fond of each other's company, and are

seldom found at any great distance apart. We see them in winter under tall hedges, or on the sunny sides of woods and copses, seeking for crabs, acorns, or the grubs and worms hidden under cow-dung, feeding in perfect silence, but so timid and watchful, that in this season the sportsman seldom gets near them. When disturbed, they take shelter in the depth of the thicket, and call to each other in a harsh and loud voice that resounds through the covert. The Welsh call the jay '*screch y coed*,' the screamer of the wood.' They may easily be caught in the garden with a rat-trap baited with a bean.

The *swarming of bees* takes place about the commencement of June.

As *Bees*, that when the skies are calm and fair,
 In June, or the beginning of July,
 Launch forth colonial settlers in the air,
 Round, round, and round-about, they whiz, they fly,
 With eager worry whirling here and there,
 They know not whence, nor whither, where, nor why,
 In utter hurry-scurry, going, coming,
 Maddening the summer air with ceaseless humming;
 Till the strong frying-pan's energetic jangle
 With thrilling thrum their feebler hum doth drown,
 Then passive and appeased, they droop and dangle,
 Clinging together close, and clust'ring down,
 Linked in a multitudinous living tangle
 Like an old tassel of a dingy brown;
 The joyful farmer sees, and spreads his hay,
 And reckons on a settled sultry day.

WHISTLECRAFT.

One of the most interesting scenes in June, is, in its perfect state, the angler's may-fly (*ephemera vulgata*), which appears about the 4th, and continues nearly a fortnight. It emerges from the water, where it passes its aurelia state, about six in the evening, and dies about eleven at night. There are also the golden-green beetle (*scarabæus auratus*); various kinds of flies; the cuckoo-spit insect (*cicada spu-maria*), and the stag-beetle (*lucanus cervus*). The

several species of the gad-fly (*æstrus bovis*—*equi*—and *ovis*), the ox, horse, and sheep gad-fly, make their appearance in June¹.

The innumerable species of *insects* that are called into life by the heat in this month, afford a never-failing source of amusement and instruction to the admirer of Nature's minutest works. Many of these are only discoverable by the *microscope*, and are eminently worthy of our observation.

The grasshopper makes his appearance in this month. The following stanzas, by a poet of the seventeenth century, are written with much fancy, spirit, and (what we do not often find in poets of *Love-lace's* time) a feeling and observation of nature:—

Oh, thou that swing'st upon the waving hair
Of some well-filled oaten beard,
Drunk ev'ry night with a delicious tear
Dropped thee from heaven, where now thou'rt reared;

The joys of earth and air are thine entire,
That with thy feet and wings dost hop and fly;
And, when thy poppy works, thou dost retire
To thy carved acorn-bed to lie.

Up with the day, the Sun thou welcom'st then,
Sport'st in the gilt-plats of his beams,
And all these merry days mak'st merry men,
Thyself, and melancholy streams,

But ah, the sickle! golden ears are cropped;
Ceres and Bacchus bid good night;
Sharp frosty fingers all your flow'rs have topped,
And what scythes spared, winds shave off quite.

¹ There are a great many insects which enjoy being only for a single day; which, having come into life with the advancing, leave it again with the descending sun. There are others, again, whose period of life is extended to a season; over whom spring, and summer, and autumn pass, and they are known no more. Man is a being, not, indeed, of a day or of a single season; yet, in all the successive stages of his existence, in his progression, perfection, and decay, the similarity of his destiny is obvious and striking. The life of the insect is that of man in miniature. There is a morning, a noonday, and an evening; a spring, a summer, and an autumn, in the limited biography of both.—*Gillespie on the Seasons*, p. 81.

Poor verdant fool ! and now, green ice, thy joys
Large and as lasting as thy perch of grass,
Bid us lay in 'gainst winter, rain, and poise
Their floods with an o'erflowing glass.

The fern-owl may be seen about the middle of the month, in the evening, among the branches of oaks, in pursuit of its favourite repast, the fern-chaffer (*scarabæus solstitialis*).

Mackerel (*scomber scomber*) are taken in abundance this month.

The several kinds of *corn* come into ear and flower in June, as well as most of the numerous species of *grasses*. See T.T. for 1818, p. 205, for an account of the various kinds of wheat; and p. 150 for a description of the grasses.

Gooseberries, currants, and strawberries, now begin to ripen.

The *hay-harvest* commences about the end of the month, in the southern and midland parts of the kingdom. About this time, also, birds cease their notes.

The rural ceremony of *sheep-shearing* usually takes place in June, and was formerly celebrated with much innocent pastime. A dinner was provided, with music and songs, and a *shepherd-king* was elected, an office always conferred upon the individual whose flock had produced the earliest lamb. Of a *Spanish* sheep-shearing, a pretty account is given by *Florian*, in his charming '*Estelle*,' of which, for the benefit of our English readers, we give a translation,—and, to show our gallantry to our fair correspondents, we insert the version of E ——— :
' Having seated themselves in a circle, the shearers commence their operations; and the clinking of the shears, the songs of the young shepherdesses, and the joyful shouts of the whole community, do not interrupt the sound of the bagpipe, to which they who have no sheep are dancing. A little farther on are a few healthy young men exercising themselves in

leaping, wrestling, &c.; others upon little horses, as swift as stags, dispute the prize in racing; while a few, with a mallet made of the wood of the service-tree, are beating in the air balls of box-wood. Some of the shepherds quit their employment to join the shepherdesses in the dance; while the little girls in their absence seize their heavy scissars, and with a weak and unaccustomed hand clip the wool from the end of the tail, fearing to offend the sheep by making further advances. At length the hour of refreshment arrives; and all run to secure a place round a large table, crowned with every thing the country affords. Happiness and sobriety always preside at these festivals. The rich bear the expense, and the poor do the honours of the table. Husbands and lovers are seated by the side of their wives and mistresses; mothers are talking of the prizes their sons have just gained, and the old men are narrating stories of 'olden tyme;' while the young shepherds are amusing themselves with singing new songs. The perfumes of the beautiful nose-gays give an additional zest to the wine which sparkles in their glasses, and cheers, but not inebriates. All are contented, all are happy, and the day is spent in work, love, and pleasure.—In the evening, after the wool has been carried to the village, they all assemble under an old poplar, whose trunk lies surrounded by a double border of turf, and which has been consecrated to this use for more than a century. Under its branches are seated the old men, holding a young lamb, decorated with ribbons and garlands of flowers, the prize allotted to the best singer.'

Various species of veronicas and speedwells are now seen with their blue flowers; together with the sweet and fragrant honeysuckle (*lonicera periclymenum*), admired by all for the charms which it imparts to the rural walk. The *gum cistus* tribe shed daily their abundant flowers, covering the ground

with the most delicate blossoms. The *heaths* begin to shine in all their glory, throughout this and the succeeding month, giving life and gaiety to bleak and sterile tracts. The onion tribe, the *junci*, or rushes, the *carices*, and many of the umbelliferous tribe, now show their blossoms; as, the wild carrot, the seeds of which are gratefully aromatic, and the tea an excellent medicine. The coriander (*coriandrum*), distinguished from the caraway (*carum*) by the globular form of its seeds, the parsnip, the fennel, and a variety of others of the same tribe; the *plantago* or plantain; the dogberry tree (*cornus sanguinea*), the true love, the *sedum acre*, or wall pepper, which grows when suspended by the roots; the *salvia verbenaca*, wild clary or sage; and the *valeriana officinalis*, or great wild yalerian, are now in flower. The flower de luce, or iris, also shines in the garden: the structure of its pistils is particularly worthy of attention; it has an elegant, faint, yet exquisite scent.

The trees, particularly the laurels and evergreens, now make their second or *midsummer shoots*; and the *acacia* at length puts out its elegant light and bright foliage, and its tassels of white papilionaceous flowers, which emulate the orange in scent.

The *maritime plants* which flower this month are, the sea-barley (*hordeum maritimum*), sulphur-wort (*pucedanum officinale*), and loose sedge (*carex distans*), in salt marshes; the sea-plantain (*plantago maritima*), among rocks on the sea-coast; and slender-leaved buffonia (*buffonia tenuifolia*), and the tassel pond-weed (*ruppia maritima*), in salt water ditches. To these may be added, the common alkanet (*anchusa officinalis*), the narrow-leaved pepperwort (*lepidum ruderale*), and the Roman nettle (*urtica pilulifera*), in sea wastes; the black salt-wort (*glaux maritima*), on muddy shores; the sea chickweed (*arenaria peploides*), and the common sea-rocket (*bunias cakile*), on sandy shores; and the

perfoliate cabbage (*brassica orientalis*) among maritime rocks.

In our Naturalist's Diary for January 1822, pp. 20-23, we offered some remarks on *Calendars of Flora*, and on the study of Botany: the latter subject was continued in our Diary for *June* of that year (p. 179), and at p. 181 we took occasion to recommend to our readers a most excellent guide or introduction to the study of botany: we have now the pleasure of naming another work by the same ingenious author, of which we can give an equally favourable report. The comprehensive title of the book will best explain its nature and pretensions: '*Hortus Anglicus*; or, the Modern English Garden; containing a familiar Description of all the Plants which are cultivated in the Climate of Great Britain, either for Use or Ornament, and of a Selection from the established Favourites of the Stove and Greenhouse; arranged according to the System of Linnæus; with Remarks on the Properties of the more valuable Species.'

In promotion of the study of Botany in the *midland counties of England*, we take this opportunity of naming Mr. T. PURTON'S '*Midland Flora*;' or a Botanical Description of British Plants in the Midland Counties, particularly of those in the Neighbourhood of Alcester; with occasional Notes and Observations: to which is prefixed a short Introduction to the Study of Botany, and to the Knowledge of the principal natural Orders.' The author of this book is, we understand, a Surgeon, at Alcester, and it is highly creditable to his botanical knowledge, as well as to his good taste in selecting this useful study as a relaxation from the duties of a laborious profession. It were much to be wished that works of a similar nature, *equally well executed*, were more

¹ The *British Botanist*; with sixteen most beautifully executed plates (Rivingtons).

numerous; as, by such means, a number of the more *minute vegetables* might be detected, and the economy and uses of those which have been already discovered might be better known. This work is very handsomely printed on fine paper, and does honour to the provincial press: but we are not surprised at this—*Stratford-upon-Avon* was the birth-place of our immortal Shakspeare. In the Preface to the *Midland Flora*, the author has made some very sensible observations on the ‘Study of Botany,’ with which we shall conclude our account of his useful and elegant volumes.

‘The Study of Botany,’ says Mr. Purton, ‘has been for some years on the decline among my fair countrywomen. One cause of this may have been the terms and expressions used in systems of botany; to which there is certainly a much stronger objection, than the harshness of their sounds to a lady’s ear. It has been the author’s peculiar care in the following work to remove this impediment, by studiously avoiding whatever might offend that delicacy, which is so justly the ornament of the female mind. Catching a little of the spirit of the times, he presumes to offer to the public “a reform in the study of botany;” and hopes again to see this fascinating and very useful branch of Natural History resume a place in female education. It is now become essentially necessary, by Act of Parliament, that every student in medicine should possess a competent knowledge of botany. The interest which a common walk in the fields receives from “the pursuits of botany” will be considerably increased, when a lady discovers that she can assist a friend or a relative in his studies, by discovering for him the habitat of a plant, or its natural residence in its wild state.

‘To work a reform in the tastes and amusements of the rising generation, they must be conducted into a better channel; in the place of the frivolous and the

vain, they must be supplied with useful and interesting pursuits. Where can there be a more rational employment, more conducive to health, or more innocent, than the study of botany? If the Midland Flora should add to the innocent pleasures of the rising generation, or should aid the progress of the medical student in the science of botany, it will be a sufficient reward to the author.

‘In order to acquire a thorough knowledge of any science, it is absolutely necessary that we enter into the practical part. We must acquaint ourselves with the very minutiae of the principles upon which it is founded, or our labour will avail but little. This particularly holds good in the study of botany. Unless the most minute attention be paid to the generic as well as specific differences of plants, those nice distinctions on which the Linnæan mode of classification is grounded, the student will soon be lost in a maze of difficulties, and may be tempted to relinquish a pursuit which appears so intricate and perplexing. However, let him not be discouraged. The more the science of botany is cultivated, the more useful will it be to mankind. While it widens the range of human knowledge, it increases our enjoyments; and, what is of no small moment, the study of these His “lowliest works” will teach us to look up with gratitude and admiration to HIM whose care is over all his works, “*from the cedar that is in Lebanon, even unto the hyssop that springeth out of the wall.*” Thus may botany be a means of exciting in us ideas which may lead to moral and religious consequences; and pave the way to those higher advances in piety, which are the very threshold and vestibule of the happiness of heaven.’

3. An Appendix to the Midland Flora, chiefly relating to British Fungi, has been lately published in two volumes, of which some notice will be given in our Diary for November.

JULY.

THIS word is derived from the Latin *Julius*, the surname of C. Cæsar, the dictator, who was born in it. Mark Anthony first gave to this month the name of July, which was before called *Quintilis*, as being the fifth month in the year, in the old Roman calendar established by Romulus.

Remarkable Days

In JULY 1823.

2.—VISITATION OF THE BLESSED VIRGIN MARY.

THIS festival was first instituted by Pope Urban VI, in commemoration of that remarkable journey which the Mother of our Lord took into the mountains of Judæa, in order to visit the mother of St. John the Baptist.

The VIRGIN.

Mother! whose virgin bosom was uncrosth
With the least shade of thought to sin allied;
Woman! above all women glorified,
Our tainted nature's solitary boast;
Purer than foam on central ocean tost!
Brighter than eastern skies at daybreak strewn
With fancied roses, than the unblemished noon
Before her wane begins on Heaven's blue coast;
Thy Image falls to earth. Yet some, I ween,
Not unforgiven the suppliant knee might bend,
As to a visible Power, in which did blend
All that was mixed and reconciled in Thee
Of mother's love with maiden purity,
Of high with low, celestial with terrene!

WORDSWORTH.

*2. 1822.—DR. JOHN REID DIED,

Well known as a popular Lecturer on the Theory and Practice of Medicine, and as the author of the *Medical Reports in the Monthly Magazine*, for some years past. He also wrote 'an Account of the Savage Youth of Avignon, 12mo, 1801;' 'a Treatise

on Consumption, 8vo, 1806; and some elegantly penned and interesting 'Essays on Hypochondriasis, and other Affections, 8vo, 1822.'

3.—DOG-DAYS BEGIN.

These are a certain number of days before and after the heliacal rising of *Canicula*, or the dog-star, in the morning. The dog-days in our modern Almanacks occupy the time from July 3d to August 11th; the name being applied now, as it was formerly, to the hottest time of the year.

4.—TRANSLATION OF SAINT MARTIN.

This day was appointed to commemorate the removal or translation of St. Martin's body from one tomb to another much more noble and magnificent; an honour conferred upon the deceased saint by Perpetuus, one of his successors in the see of Tours.

7.—THOMAS A BECKET.

This haughty prelate was born in London, in the year 1119, and was the son of Gilbert, a merchant, and Matilda, a Saracen lady, who is said to have fallen in love with him when he was a prisoner to her father in Jerusalem. Thomas received the first part of his education at Merton Abbey in Surrey, whence he went to Oxford, and afterwards studied at Paris. In 1159, he made a campaign with King Henry to Toulouse, having in his own pay 1200 horse, besides a retinue of 700 knights or gentlemen. —For further particulars respecting Becket we refer to T. T. for 1814, pp. 166-172; for 1815, p. 220; and for 1822, p. 198.

15.—SAINT SWITHIN.

Swithin was promoted to holy orders by Helmstan, Bishop of Winchester, at whose death, in 852, King Ethelwolf granted him the see. In this he continued eleven years, and died in 868. For some remarks on the popular saying respecting St. Swithin, see our former volumes.

*—**CORNISH CARNIVAL.**—*See T. T. for 1822,*
p. 193.

19. 1821.—KING GEORGE IV CROWNED.

Some interesting particulars of this august ceremony will be found in our last volume, pp. 194-206. This description our friends may peruse, either before or after they have visited '*Mr. Aston Barker's splendid and accurate Panorama of the Procession.*'

20.—SAINT MARGARET.

She was born at Antioch, and was the daughter of a Pagan priest. Olybius, president of the East, under the Romans, wished to marry her; but finding that Margaret was a Christian, he postponed his intended nuptials until he could prevail on her to renounce her religion. Our saint, however, was inflexible, and was first tortured, and then beheaded, in the year 278.

A beautiful dramatic poem on the subject of this martyrdom has lately appeared from the pen of Mr. MILMAN, which we strongly recommend to the notice of our readers. As a fair specimen of this interesting piece, we shall select the *Christian Hymn*, sung by the people of Antioch, immediately after the execution of Margaret, when they bore away her body in triumph.

CHRISTIAN HYMN.

Sing to the Lord! let harp, and lute, and voice
Up to the expanding gates of Heaven rejoice,
While the bright Martyrs to their rest are borne;
Sing to the Lord! their blood-stained course is run,
And every head its diadem hath won,
Rich as the purple of the summer morn;
Sing the triumphant champions of their God,
While burn their mounting feet along their sky-ward road.

Sing to the Lord! for her in Beauty's prime
Snatched from this wintry earth's ungenial clime,

In the eternal spring of Paradise to bloom;
For her the world displayed its brightest treasure,
And the airs painted with the songs of pleasure.

Before earth's throne she chose the lowly tomb,

The vale of tears with willing footsteps trod,
Bearing her cross with thee, incarnate Son of God !

Sing to the Lord ! it is not shed in vain,
The blood of martyrs ! from its freshening rain
High springs the Church like some fount-shadowing palm ;
The nations crowd beneath its branching shade,
Of its green leaves are kingly diadems made,
And, wrapt within its deep embosoming calm,
Earth sinks to slumber like the breezeless deep,
And war's tempestuous vultures fold their wings and sleep.

Sing to the Lord ! no more the Angels fly
Far in the bosom of the stainless sky,
The sound of fierce licentious sacrifice.
From shrined alcove, and stately pedestal,
The marble gods in cumbrous ruin fall,
Headless in dust the awe of nations lies ;
Jove's thunder crumbles in his mouldering hand,
And mute as sepulchres the hymnless temples stand.

Sing to the Lord ! from damp prophetic cave
No more the loose-haired Sybils burst and rave ;
Nor watch the augurs pale the wandering bird :
No more on hill or in the murky wood,
Mid frantic shout and dissonant music rude,
In human tones are wailing victims heard ;
Nor fathers by the reeking altar stone
Cowl their dark heads t' escape their children's dying groan.

Sing to the Lord ! no more the dead are laid
In cold despair beneath the cypress shade,
To sleep th' eternal sleep, that knows no morn :
There, eager still to burst death's brazen bands,
The Angel of the Resurrection stands ;
While, on its own immortal pinions borne,
Following the Breaker of th' imprisoning tomb,
Forth springs the exulting soul, and shakes away its gloom.

Sing to the Lord ! the desert rocks break out,
And the thronged cities, in one gladdening shout ;
The farthest shores by pilgrim step explored ;
Spread all your wings, ye winds, and waft around,
Even to the starry cope's pale waning bound,
Earth's universal homage to the Lord :
Lift up thine head, imperial Capitol,
Proud on thy height to see the bannered cross unroll.

Sing to the Lord ! when time itself shall cease,
And final ruin's desolating peace

Enwrap this wide and restless world of man;
 When the Judge rides upon th' enthroning wind,
 And o'er all generations of mankind
 Eternal Vengeance waves its winnowing fan;
 To vast Infinity's remotest space,
 While ages run their everlasting race,
 Shall all the Beatific Hosts prolong,
 Wide as the glory of the Lamb, the Lamb's triumphant song!

22.—MARY MAGDALEN.

This day was first dedicated to the memory of St. Mary Magdalen, by King Edward VI; and in his Common Prayer, the *Gospel* for the day is from St. Luke, chap. vii, verse 36. Our reformers, however, upon a more strict inquiry, finding it doubtful whether this woman, mentioned in the Gospel, was really Mary Magdalen, thought it prudent to discontinue the festival.

25.—SAINT JAMES.

James was surnamed the *Great*, either on account of his age, being esteemed older than the other *James*, or for some particular honour conferred upon him by our Lord. He was by birth a Galilean, and partner with Peter in fishing, from which our Lord called him to be one of his disciples: *Mark* i, 19, 20. Of his ardent zeal, no other proof is necessary than his becoming the victim of Herod Agrippa.

The Spaniards esteem James their tutelar saint; and the lower orders of the people in London gorge themselves with *oysters* on this day, let them be good or bad, and the weather *hot* or *cold*: the *children* of these gourmands, however, are contented with the *shells*, with which they *erect* grottos, illuminated by an inch of rushlight; and to defray the expenses of this infantine celebration, they do not cease to beg halfpence of the passengers. This *fête of the oysters*, although it is said to come but *once a year*¹, lasts

¹ 'I am inclined to believe,' says Don Leucadio Doblado, in his Letters from Spain, 'that the *illuminated grottoes of oyster shells*, for which the London children beg about the streets, are the representatives of some Catholic emblem, which had its day as a substitute for

for some weeks, to the great annoyance of those who pedestrianise in the streets of London in the months of August and September: a rare occupation, let us hope, for such as think with the writer,—who would as soon be caught in a thunder-storm on the top of Snowdon,—or pass a night in the Catacombs of Paris, among the skulls and bones of departed millions.

26.—SAINT ANNE.

She was the mother of the Virgin Mary, and the wife of Joachim her father. Her festival is celebrated by the Latin church.

Astronomical Occurrences

In JULY 1823.

SOLAR PHENOMENA.

THE Sun enters Leo at 57 m. after 5 in the afternoon of the 23d of this month; he will also be *visibly* eclipsed in the morning of the 8th. This, however, will be but a very partial obscuration, as the following particulars sufficiently show:

	m.	s.	
Beginning of the eclipse . . .	13	49	after 5 in the morning.
Middle	27	2	
Visible conjunction	24	41	
End of the eclipse	40	27	
Total duration	26	38	
Digits eclipsed 21' 23".			

The Sun likewise rises and sets, during this month, as in the following

a more classical idol. I was struck in London with the similarity of the plea which the children of both countries urge in order to obtain a halfpenny. The "it is but once a year," often reminded me of the

La Cruz de Mayo que no come ni bebe en todo el año.

The Cross of May
Remember pray,
Which fasts a year and feasts a day.'

TABLE
Of the Sun's Rising and Setting for every fifth Day.

July 1st, Sun rises 46 m. after 3.	Sets 14 m. after 8
6th, - - - 49 - - - 3	11 - - - 8
11th, - - - 52 - - - 3	8 - - - 8
16th, - - - 57 - - - 3	3 - - - 8
21st, - - - 3 - - - 4	57 - - - 7
26th, - - - 10 - - - 4	50 - - - 7
31st, - - - 18 - - - 4	42 - - - 7

Equation of Time.

Many occasions occur in which it is necessary to reduce apparent into true or mean time, and the contrary; and for this purpose the equation is computed, and is to be used for the present month as directed in the following

TABLE
Of the Equation of Time for every fifth Day.

Tuesday, July 1st, to the time by the dial	add	^{m.} 3	^{s.} 15
Sunday - - - 6th, - - - - -	-	- 4	11
Friday - - - 11th, - - - - -	-	- 4	59
Wednesday - - 16th, - - - - -	-	- 5	35
Monday - - - 21st, - - - - -	-	- 5	58
Saturday - - - 26th, - - - - -	-	- 6	8
Thursday - - - 31st, - - - - -	-	- 6	3

LUNAR PHENOMENA.

Phases of the Moon.

Last Quarter, 1st day, at 31 m. past 1 afternoon
New Moon - - 8th - - 40 - - - 6 morning
First Quarter 15th - - 21 - - - 1 - - -
Full Moon - - 23d - - 28 - - - 3 - - -
Last Quarter, 30th - - 50 - - - 10 at night.

Total Eclipse of the Moon.

The Moon will be totally eclipsed early in the morning of July 23d, when she will descend below the western horizon, involved in total obscurity, which is thus described by the poet:—

The silver Moon is all o'er blood,
A settling crimson stains her beauteous face.

The following are the particular circumstances attending this phenomenon:—

	m.	s.	
Beginning of the eclipse	29	56	after 1 morning
Beginning of total darkness	36	40	2
Middle of eclipse	26	3	3
Ecliptic conjunction	28	4	3
Moon sets totally eclipsed	10	3	4
Total darkness ends	15	26	4
Eclipse ends	22	10	5
Whole duration of the eclipse 3h. 52m. 14s.			
Digits eclipsed	18°	10' 50"	from the north side of the earth's shadow.

Moon's Passage over the Meridian.

The Moon will pass the first meridian of this country at the following times this month, which will afford favourable opportunities for observation, if the atmosphere be clear; viz.

July 2d, at 17 m. after 6 in the morning	
3d, ... 7	7
16th, ... 57	6 in the evening
17th, ... 46	7
18th, ... 36	8
19th, ... 27	9 at night
20th, ... 17	10
21st, ... 6	11
22d, ... 53	11

PHENOMENA PLANETARUM.

Phases of Venus.

The proportional phases of this planet, at the beginning of this month, will be as follow; viz.

July 1st, {	Illuminated part = 7.558 digits
	Dark part = 2.442

Eclipses of Jupiter's Satellites.

There will only be one eclipse of these satellites visible at the Royal Observatory this month, and that will be of the first; the *emersion* taking place at 5 m. 51 s. after 3 in the morning of the 19th.

Form of Saturn's Ring.

July 1st, {	Transverse axis	1.000
	Conjugate axis	— 0.436

R

TABLE
Of the Transits and Meridional Altitudes of the Planets.

	1st	7th	13th	19th	25th
	TRANSITS.				
	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
Mercury	11 16 <i>mor.</i>	10 46	10 34	10 33	10 49
Venus	3 1 <i>aft.</i>	3 1	3 1	2 59	2 57
Mars	10 21 <i>mor.</i>	10 14	10 7	10 1	9 54
Jupiter	10 54 <i>mor.</i>	10 35	10 17	9 58	9 39
Saturn	8 36 <i>mor.</i>	8 14	7 52	7 29	7 7
G. Sidus	0 6 <i>mor.</i>	11 40 <i>night</i>	11 11	10 45	10 24
	MERIDIONAL ALTITUDES.				
Mercury	57°14'	56°39'	58°43'	59°57'	60°43'
Venus	54 17	51 48	49 9	46 24	43 35
Mars	61 28	61 54	62 12	62 23	62 27
Jupiter	62 27	61 31	61 34	61 36	61 38
Saturn	54 15	54 23	54 31	54 37	54 43
G. Sidus	15 0	14 59	14 58	14 57	14 56

Other Phenomena.

Georgium Sidus will be in opposition at a quarter past 8 in the morning of the 2d. Mercury will be stationary on the 5th, and Venus will be in conjunction with α , in Leo, on the 6th, when the planet will be 57' north of the star. Mercury will also attain his greatest elongation on the 16th. On the following day, Jupiter and Mars will be in conjunction, the former planet being 45½' south of the latter. The Moon will likewise be in conjunction with α , in Scorpio, at 50 m. after 5 in the afternoon of the 18th, and with Georgium Sidus at 37 m. past 9 in the morning of the 21st.

The eclipses of the Sun and Moon, which happen on the 8th and 23d, have already been described. Eclipses were, in antient times, always regarded as calamitous omens; and this superstition is frequently alluded to by the poets: it forms the foundation of one of the finest similes in *Paradise Lost*:—

As when the Sun, new risen,
Looks through the horizontal misty air,
Shorn of his beams, or from behind the Moon,

In dim eclipse, disastrous twilight sheds
On half the nations, and with fear of change
Perplexes monarchs; darkened so, yet shone
Above them all th'archangel.

For the amusement of our poetical readers, we shall insert in this place Mr. WORDSWORTH's beautiful poem on the *annular* Eclipse of the Sun which took place in September 1820:—

High on her speculative tow'r
Stood Science, waiting for the hour
When Sol was destined to endure
That dark'ning of his radiant face
Which Superstition strove to chase,
Erewhile, with rites impure.

Afloat beneath Italian skies,
Through regions fair as Paradise,
We gaily passed,—till Nature wrought
A silent and unlooked-for change,
That checked the desultory range
Of joy and sprightly thought.
Where'er was dipped the tolling oar,
The waves danced round us as before,
As lightly, though of altered hue;
'Mid recent coolness, such as falls
At noontide from umbrageous walls
That screen the morning dew.

No vapour stretched its wings; no cloud
Cast far or near a murky shroud;
The sky an azure field displayed;
'Twas sun-light sheathed and gently charmed,
Of all its sparkling rays disarmed,
And as in slumber laid:

Or something night and day between,
Like moonshine—but the hue was green;
Still moonshine, without shadow, spread
On jutting rock, and curved shore,
Where gazed the peasant from his door,
And on the mountain's head.

It tinged the Julian steeps—it lay
Upon Lugano's ample bay;
The solemnizing veil was drawn
O'er villas, terraces, and tow'rs,
To Albogasio's olive bow'rs,
Porlezza's verdant lawn.

But Fancy, with the speed of fire,
Hath fled to Milan's loftiest spire,
And there alights 'mid that aerial host
Of figures, human and divine,
White as the snows of Apennine
Indurated by frost.

Awe-stricken, she beholds th' array
That guards the Temple night and day;
Angels she sees that might from heav'n have flown ;
And virgin saints—who not in vain
Have striv'n by purity to gain
The beatific crown ;

Far-stretching files concentric rings,
Each narrowing above each ; the wings,
The uplifted palms, the silent marble lips,
The starry zone of sov'reign height,
All steeped in this portentous light!
All suff'ring dim eclipse !

Thus after man had fall'n (if aught
These perishable spheres have wrought
May with that issue be compared)
Throngs of celestial visages,
Dark'ning like water in the breeze,
A holy sadness shared.

See! while I speak, the lab'ring Sun
His glad deliv'rance has begun:
The cypress waves its sombre plume
More cheerily; and town and tow'r,
The vineyard and the olive bow'r,
Their lustre re-assume!

Oh, ye who guard and grace my home,
While in far-distant lands we roam,
Enquiring thoughts are turned to you;
Does a clear ether meet your eyes?
Or have black vapours hid the skies
And mountains from your view?

I ask in vain—and know far less
If sickness, sorrow, or distress,
Have spared my dwelling to this hour:
Sad blindness! but ordained to prove
Our faith in heav'n's unfailing love
And all-controlling pow'r.

REFLECTIONS ON THE STARRY HEAVENS.

The *Starry Heavens* indisputably present one of the most stupendous and magnificent displays of Creative Power; and have, in all ages, equally arrested the attention of the thoughtless, and fixed the admiration of the philosopher. Could it be otherwise, when infinite power, infinite wisdom, and infinite goodness, are displayed in characters so conspicuous, so attractive, and so brilliant? Here the admirer of splendour may gaze, unrestrained and unsatiated! Here the contemplative mind may range unfettered by system, and unconfined by space! Here the lover of order is more than gratified—is delighted—by the harmony the heavens present! While the devout mind rises above the wonders that are seen, and, in reference to the *Great First Cause*, exclaims with the enraptured Milton,

Yet these declare
Thy goodness beyond thought, and pow'r divine!

In contemplating those gems of the azure canopy, we shall merely present such observations as, we trust, are calculated to interest and instruct our youthful readers. While we thus attempt to lead them from the frivolities of the passing hour to contemplate the scene where the celestial orbs for ever shine in unborrowed lustre, may the mind, expanded by the subject, imbibe more exalted ideas of Infinite Wisdom and Goodness, and then it will sink into itself with corrected views of its own importance. Nothing is more common than for the uninstructed to regard this nocturnal display of matchless power and unparalleled skill as merely designed to light their wandering feet across this speck of earth; but let such reflect, that they are thus cherishing their own vanity, by entertaining debasing views of the Ineffable Creator! To these the poet presents an instructive but a humbling lesson:—

And canst thou think, poor worm! these orbs of light,
In size immense, in number infinite,
Were made for thee alone—to twinkle in thy sight?
Presumptuous mortal! can thy nerves descry
How far from thee they roll, from thee how high?
With all thy boasted knowledge, canst thou see
Their various beauty, order, harmony?
If not—then sure they were not made for thee.

BAKER.

When, on a bright evening, we survey the heavens, and see these sparkling luminaries above and around us, they at first appear to be merely fixed points; but when the observation is continued for a short period, they are successively seen in various places. As their relative distances remain the same, and they all advance towards the west, we soon perceive that their motions are of the same kind as those of the Sun and the Moon. They are seen to rise successively one after another, in a determinate order; to pass over the sky; and then set, each in its order and in its peculiar position. Some of the stars, however, never reach the horizon, but continually describe circles round the pole. This phenomenon depends upon the position of the observer; for when he is at the equator, they all appear to rise and set; and, were he situated at either of the poles of the earth, he would see them all describing circles completely round him, parallel to the horizon, and consequently never descending below it. At every position between these points, some of the stars constantly rise and set, others as uniformly complete their revolutions with quitting the visible hemisphere. When we are supposed to be at the equator, the poles of the heavens are situated in the horizon; but as we advance into either hemisphere, the pole which we approach becomes more and more elevated, and its altitude is always equal to the latitude of the place of observation. To an inhabitant of London, for instance, the elevation of this point, which is the *North Pole*, is $51^{\circ} 31'$; and numbers of stars are consequently to be seen which never reach the horizon.

To have correct ideas of the sensations arising from the appearances of the heavenly bodies, it should be observed that they become visible only by the luminous rays they transmit. When one of these bodies is observed, the rays proceeding from the opposite sides of its disk intersect each other in the eye of the observer, and form there a certain angle. It is the arc which measures this angle that determines the apparent diameter of the object. By this means it is that the apparent magnitudes of the Sun, Moon, and planets, are measured; but as the fixed stars do not offer such a regular disk as to enable the eye to appreciate their contour, they appear only as brilliant points in the sky: they, however, retain constantly the same mutual arrangement and the same order, always rising and setting at the same points of the horizon, without any perceptible difference, except after long intervals of time. The planets are readily distinguished from the fixed stars by the want of permanency in their relative positions; for, though they rise and set like the stars, it may readily be perceived, after the lapse of a few days, that these positions have changed: they no longer appear to accompany the same stars, nor rise and set at the same points of the horizon.

Astronomy teaches that the Sun is the centre of the system to which our Earth belongs, and that he shines by his own light: the Moon, and all the planetary bodies, also belong to the same system, and revolve round him as their common centre. By the effects of this motion, in conjunction with their apparent magnitude, their distance from the Sun and the Earth are computed; but as the fixed stars are not included in this system, and are so remote that the rays proceeding from the opposite sides of their disks do not form an angle at the eye of the observer that can be measured, neither their magnitudes nor distances can be made the subjects of calculation. Various circumstances, however, concur to prove

that the stars, like the Sun, shine by their own light, and their distance from the Earth is estimated by its velocity. Light moves at the rate of about twelve millions of miles a minute; and such is the amazing distance of the stars supposed to be, that it is three years in passing from the nearest of them to the Earth.

The light of the stars is, to the naked eye, generally white, being too faint to excite the idea of any particular colour; but when it is concentrated by large speculums, it appears of various hues. To the naked eye, indeed, some of the stars are a little redder than the others. All of them have more or less scintillation or twinkling in their appearance, the cause of which has not been fully ascertained; but it has been thought to be an effect of the atmosphere, as in some climates, where the air is remarkably pure and serene, the scintillation is greatly diminished. The number of stars that can be seen by the naked eye at once, is seldom much above a thousand, though, from their twinkling, and the indistinct manner in which they are viewed, they appear to be almost infinite. The whole number that can be embraced by the eye, taking in both hemispheres, is supposed to exceed 3000; but when they are viewed through high magnifying telescopes their number becomes so immensely increased, as to justify the conclusion of considering them almost, if not altogether, without limits. Dr. *Herschel* was of opinion that the Milky-way consists of an assemblage of stars too remote to be singly seen, but so closely disposed as to give a luminous appearance to that part of the heavens. On directing his large telescope to this part of the heavens, he has observed an immense number of stars pass the field of view in a few minutes. If the appearance of the heavens on a fine winter's night, when the sky is perfectly clear, justified the poet in representing the myriads of stars as baffling the utmost powers of calculation, how much

more the reality when viewed through the most perfect instrument which human skill and ingenuity has devised !

To count their numbers, were to count the sands
That ride in whirlwinds the parched Lybian air.

ARMSTRONG.

[To be continued.]

The Naturalist's Diary

For JULY 1823.

Silence girt the woods; no warbling tongue
Talked to the Echo——
Only the curled streams soft chidings kept;
And little gales that from the greene leaf swept
Dry Summer's dust, in fearefull whisp'rings stirred,
As loth to waken any singing bird.

SUMMER may be said to begin with this month. How delightful to the admirer of Nature is a morning ramble at this season, before the heats of the day are felt! 'Do you know what you lose (we ask in the language of a popular modern writer)' 'by spending those hours in sleep which might be devoted to the most pleasing and most substantial enjoyment? Only recollect the peculiar fascinations of the morning. Think upon the feelings which they are calculated to excite. Picture to yourself—(and if you imagine I have painted in too glowing colours, rise to-morrow and compare it with the reality, and if there be one tint too vivid, one touch too flattering, destroy the painting, and forget the artist,)—picture to yourself a summer morning. The Sun rising in all his native majesty, shedding his beams with a gentle influence, which, whilst it predicts their increasing power, teaches us to value their present mildness; every object, as it catches the first rays of "the powerful king of day," appearing to smile at his approach; the lengthened shadows that shoot across the meadow, slowly dimi-

¹ Letters on Early Rising, 12mo, third edition. (Taylor and Hessey.)

nishing as he advances. The clouds, that seemed to check his early progress, gradually yielding to his growing might, and, "illuminated with fluid gold," disappearing amid "the kindling azure." The glistening dewdrops, "stars of morning," impearling every leaf. Vegetation clothed in a richer verdure, and the variegated flowers in livelier hues. The groves resounding with the melody of the feathered tribes, who appear susceptible of gratitude for the return of the opening day. Whilst every animal is in motion, and seems to feel a new satisfaction in the exercise of its active powers and the revival of its capacities for enjoyment.'

Another modern author affords us the following accurate and beautiful picture of early morn. 'How delicious is the prime of the morning! It is to a summer's day what the spring is to the year, or childhood to human life. The dew hangs, like a blessing, on the glittering leaves; and the mists are rising from the grass, like the smoke of an acceptable sacrifice, steaming up to the heavens. *Hark to those heifers cropping the crisp herbage.* I know of no sound more purely pastoral: it is as refreshing to an ear sick of the talk of towns, as a draught of ice-cold water is to a parched palate! And how sweetly it meets and harmonises with the rich melody that comes down from yonder mounting lark! Here are no other sounds stirring;—for the Sun has not yet awakened the breezes—the bee is still wrapped in its honey-heavy slumbers,—and the "hum of men" is a thing of memory only.'

To these descriptions we add a 'Sun-Rise,' from the pallet of that master-painter, Lord Byron:—

The day at last has broken. . . . And can
The Sun so rise, so bright, so rolling back the
Clouds into vapours more lovely than the
Unclouded sky with golden pinnacles, and
Snowy mountains, and billows purpler than
The ocean's, making in heaven a glorious mockery
Of the earth, so like we almost deem it

Permanent ; so fleeting, we can scarcely call
 It aught beyond a vision, 'twas so transiently
 Scattered along the eternal vault : and yet
 It dwells upon the soul, and soothes the soul,
 And blends itself into the soul, until
 Sun-rise and sun-set form the haunted epoch
 Of sorrow and of love.

*Sardanapalus*¹.

The numbers of our migrating visitors in the summer of 1821 were very small : most of our fruit devouring and insectivorous birds retire to warmer regions at the approach of winter, and return in the spring ; hence we might suppose that their numbers would be annually nearly the same, by their not encountering the want and waste that winter occasions ; but this is not the case : the numbers of our summer visitors are very uncertain, and they appear to incur so much loss and havock in their passage, or return, by adverse winds, birds of prey, and fatigue, that their scarcity, in some summers, is as manifest as their abundance is in others. Were it not for the constant provision of nature in confining the increase of its creatures, the labours of the agriculturist would often be ruined by their numbers. The scourges with which man is admonished or afflicted, are frequently formed of minute agents, as the worm, the slug, the insect, the mildew (a minute fungus) : the havock that small birds make in our corn fields in some summers is deplorable ! The increase of the *common sparrow* alone, without the restricting goodness of ' Him that careth for us,' would almost destroy our bread-corn ! This bird will commonly hatch fifteen young in a season, and the first of these broods, themselves, become parents the same year : they are bold, rapacious birds, and, when driven away, return again to their plunder : but the eggs of the sparrow are taken by every bird's-nesting boy in the village ; the young that are hatched, by flocking together, invite destruction ; and the swarms of

¹ For some beautiful descriptions of Sun-rise, see our last volume, pp. 210, 211, 251.

autumn are greatly reduced before spring, by guns, nets, and traps.

All is vigour and activity in the vegetable kingdom in this month, and the most patient observer of nature is almost bewildered by the countless profusion of interesting objects.

Towards the middle of the month, the spiked willow (*spiræa salicifolia*), jessamine (*jacinum officinale*), hyssop (*hyssopus officinalis*), and the bell-flower (*campanula*), have their flowers full blown. The *campanula patula* is a beautiful lilac bell-flower, found very generally on heaths and dry banks, and worth cultivating in gardens, for ornament. It flowers through the greater part of this month and the next. The wayfaring tree, or guelder rose, begins to enrich the hedges with its bright red berries, which in time turn black. The Virginian sumach (*rhus typhinum*) now exhibits its scarlet tufts of flowers upon its bright green circles of leaves. The berries of the mountain ash turn red. The lavender (*lavendula spica*) is in flower. In this and the following month, the purple loosestrife (*lythrum salicaria*) ornaments the sides of ponds and brooks, and, by its tall spike of blue flowers, gives a rich appearance to the cooling retreats of river banks: it is intermixed with the meadowsweet (*spiræa ulmaria*), the spicy fragrance of which scents the surrounding air.

A sensitive plant in a garden grew,
And the young winds fed it with silver dew,
And it opened its fan-like leaves to the light,
And closed them beneath the kisses of night.

And the spring arose on the garden fair,
Like the spirit of love felt every where;
And each flower and shrub on earth's dark breast
Rose from the dreams of its wint'ry rest.

But none ever trembled and panted with bliss
In the garden, the field, or the wilderness,
Like a doe in the noontide with love's sweet want,
As the companionless sensitive plant.

The *snowdrop*, and then the *violet*,
Arose from the ground with warm rain wet,
And their breath was mixed with fresh odour, sent
From the turf, like the voice and the instrument.

Then the pied *wind-flowers*, and the *tulip* tall,
And *Narcissi*, the fairest among them all,
Who gaze on their eyes in the stream's recess,
Till they die of their own dear loveliness.

And the Naiad-like *lily* of the vale,
Whom youth makes so fair, and passion so pale,
That the light of its tremulous bells is seen
Thro' their pavilions of tender green.

And the *hyacinth* purple, white and blue,
Which flung from its bells a sweet peal anew
Of music so delicate, soft, and intense,
It was felt like an odour within the sense.

And the *rose*, like a nymph to the bath address,
Which unveiled the depth of her glowing breast,
Till, fold after fold, to the fainting air
The soul of her beauty and love lay bare.

And the wand-like *lily*, which lifted up,
As a Mœnad, its moonlight-coloured cup,
Till the fiery star, which is its eye,
Gazed thro' clear dew on the tender sky.

And the *jessamine* faint, and sweet *tube-rose*,
The sweetest flower, for scent, that blows;
And all rare blossoms from every clime,
Grew in that garden, in perfect prime.

PERCY BYSSHE SHELLEY.

The enchanter's nightshade (*circæa lutetiana*); the Yorkshire sanicle (*pinguicula vulgaris*); the water horehound or gypsy wort (*lycopus europæus*), the great cat's tail, or reed mace (*typha latifolia*), often introduced into aquatic scenery as a graceful addition, by the most celebrated painters; the common nettle (*urtica dioica*); the goose grass (*asperula galium*); the fringed water-lily (*menyanthis nymphoides*); solanum belladonna, dulcamara and nigrum; the asparagus, and some species of rumex; with buck-wheat (*polygonum fagopyrum*), the seeds of which are extremely nutritious and wholesome—and a variety of other plants, may be almost said to

bloom, fade, and die, within the present month.—The *dianthus*, or pink and carnation tribe, grace the gardens of all; while their allies, the several species of *lychnis*, *cérastium*, and *spergula*, add beauty to the fields, and glow with every hue and shade of colorific radiance. The *rhodiola rosea* is also in bloom, the dried root of which emulates the odour of the *rose*—a flower it were almost sacrilege to name, without some poetical tribute to its peerless beauties.

—As a sweete rose fairely budding forth
 Bewrayes her beauties to th' enamoured morne,
 Until some keene blast from the envious North
 Killles the sweet bud that was but newly borne,
 Or else her rarest smells delighting
 Make herself betray,
 Some white and curious hand inviting
 To plucke her thence away.

—
 The Rose's age is but a day :
 At dawn it opens to the ray,
 Its chalice filled with dew appears,
 Like Beauty's cheek with Pity's tears ;
 At noon it wears a hue more bright,
 At eve it droops, and dies at night.
 And such is Beauty's transient bloom,
 It dawns in tears and lives in sorrow ;
 Time's nightfall shrouds it in the tomb,
 The eve of Beauty knows no morrow.

L.

Towards the end of the month, the flowers of the *laurustinus* (*viburnum tinus*), and the burdock (*arctium lappa*), begin to open; and the elecampane (*inula helenium*), the amaranth (*amaranthus caudatus*), the great water plantain (*alisma plantago*), and water mint (*mentha aquatica*), have their flowers full blown. The mezereon (*daphne mezereon*), which in January cheered the eye with its flowers without leaves, and regaled the smell, now displays its scarlet berries through its bright green leaves.

The meadows begin to whiten, and the flowers that adorn them are mowed down. The corn gradually

assumes a yellow hue, and the colours that decorate the rural scene are no longer so numerous. Corn-cockle (*agrostemma githago*) is in flower, and reminds the farmer to pull it from among his crop of wheat, lest it spoil his sample and deteriorate the bread.

As summer advances, the vocal music of the groves is lessened, and in this month may be said to cease altogether—if we except the chirping of the wren and two or three small birds. This is not the case, however, in South America, as appears by the poet's account of Summer in that wonderful country.

SUMMER was in its prime;—the *parrot-flocks*
 Darkened the passing sunshine on the rocks;
 The chrysol and purple butterfly
 Amid the clear blue light are wand'ring by;
 The *humming-bird*, along the myrtle bowers,
 With twinkling wing, is spinning o'er the flowers;
 The *woodpecker* is heard with busy bill,
 The *mock-bird* sings—and all beside is still.
 And look! the cataract that bursts so high,
 As not to mar the deep tranquility,
 The tumult of its dashing fall suspends,
 And, stealing drop by drop, in mist descends;
 Through whose illumined spray and sprinkling dews,
 Shine to the adverse sun the broken rainbow hues.
 Cheek'ring, with partial shade, the beams of noon,
 And arching the grey rock with wild festoon,
 Here, its gay net-work, and fantastic twine,
 The purple *cogul* threads from pine to pine,
 And oft, as the fresh airs of morning breathe,
 Dips its long tendrils in the stream beneath.
 There, through the trunks, with moss and lichens white,
 The sunshine darts its interrupted light,
 And, 'mid the cedar's darksome boughs, illumines,
 With instant touch, the *lori's* scarlet plumes.
 Just heard to trickle through a covert near,
 And nothing, with perpetual lapse, the ear,
 A fount, like rain-drops, filtered thro' the stone,
 And, bright as amber, on the shallows shone.
 Intent his fairy pastime to pursue,
 And, gem-like, hovering o'er the violets blue,
 The *Autumn-bird*; here, its unceasing song
 Heedlessly murmured all the summer long.

And when the winter came, retired to rest,
And from the myrtles hung its trembling nest.
No sounds of a conflicting world were near;
The noise of ocean faintly met the ear,
That seemed, as sunk to rest the noontide blast,
But dying sounds of passions that were past;
Or closing anthems, when, far off, expire
The lessening echoes of the distant choir.

BOWLES.

Insects now take the place of the feathered tribe, and, being for the most part hatched in the spring, they are now in full vigour. Gnats and flies buzz around us, the grasshopper chirps his merry note, and the dew-moth and butterfly appear. Flying ants quit their nests.

The *bee* still pursues his ceaseless task of collecting his varied sweets to form honey for his destroyer, *man*. This industrious insect, however, will sometimes retaliate, and wreak a dreadful vengeance on his tyrant.—(See our last volume, p. 218.)

In this and the following month, numbers of the shrew-mouse (*sorex*) may be seen lying in the foot-paths dead, or in a dying state.

About the middle or end of July, pilchards (*clupea pilchardus*) appear in vast shoals, off the Cornish coast; but, in the year 1821, there was so great a deficiency of fish, that the inhabitants of Cornwall were led to suppose that the pilchards had deserted the coast altogether. Of the quantity of fish annually taken in the county, it is impossible to give any specific statement. Sometimes the aggregate amount will not exceed 15,000, and at other times it exceeds 50,000, and even 70,000 hogsheads. The price also is still more variable. During the war, when the Italian ports were shut, pilchards have been so low as 15s. per hogshead; but in the year 1815 they procured £5 5s. The number of pilchards contained in each hogshead is equally variable, much depending upon the size of the fish; 3000 or 3500 may be considered as the average

number. The pilchards thus prepared for a foreign market are called *fumadoes*. This was an appellation which they received in antient times, when they were cured by being *smoked* or *fumed*, in a manner somewhat similar to herrings in the present day. The name has survived, but the practice has been forgotten.

Pilchards that are caught early, and are fat, have generally been thought to yield one hogshead of oil from ten hogsheads of fish. But it frequently happens that double this quantity will not yield more. The oil varies in price, from £20 to £28 per tun.—The common price of pilchards may be estimated at about £2 2s. per hogshead. The skimmings which float on the water in which the pilchards are washed when taken from the bulks, is called garbage, and is sold to the soap-boilers at fifteen-pence per gallon. The dregs which remain in the oil reservoir, are sold to the curriers at about sixteen-pence per gallon on an average.

Few things are more precarious than the adventures in the pilchard fisheries. The first outfit of a seine, with its boats, oars, sails, ropes, nets, and a quantity of salt sufficient to cure 500 hogsheads of fish, if purchased new, cannot be estimated at less than £1000. On the southern coast, an average year of one seine may be estimated at 250 or 300 hogsheads; but it frequently happens that many seines scarcely take a single fish. In the year 1815, a seine at Charlestown caught only eight hogsheads during the season. The employment, however, which they furnish to boat-builders, rope-makers, coopers, to those who make the nets, to smiths, as well as masons and carpenters, who build cellars, ought not to be considered a matter of small importance. The manure which the land receives from broken fish and condemned salt, is also of considerable consequence to the agriculture of the county. And in addition to this, the resources which the poor find in these

annual supplies, cannot but place the pilchard fisheries in a serious and respectable light. They also form an excellent nursery for seamen; which is another valuable consideration for England, whose prosperity depends upon its naval power, and the extension of its commerce. Connecting together the multitudes who are actually employed in taking fish, the sailors who bring salt to the ports, they who carry the annual produce to the Mediterranean markets, and the collateral branches of trade which associate with each department, we behold many thousands of seamen, who are prepared for any emergency that may demand their aid.—(*Hitchins's History of Cornwall.*)

In this and the following month, POMONA with liberal hand offers her fruits to allay the parching thirst: currants, gooseberries, raspberries, strawberries, cherries, and cranberries, are all peculiarly refreshing at this season. The best varieties of these and the other English fruits are all figured in *Mr. Brookshaw's Horticultural Repository*, now in course of publication. The plates are beautifully coloured after Nature; and were it not rather too expensive a mode of saving our fruit from the attacks of the birds, they might be suspended at a short distance from the fruit trees, and they would probably possess the same merit as a picture of Apelles did¹, and serve to decoy the feathered marauders from the substance to the shadow.

Of the unpleasant thirst arising from the great heats sometimes experienced in this and the succeeding month, we spoke in our last volume (see p. 215), contrasting it with that felt by the travellers on the burning sands of Egypt,—and illustrating our re-

¹ Apelles, having painted a picture of Alexander, the king did not express much satisfaction at the sight of it: at that moment, a horse passing by, neighed at the horse represented in the piece, supposing it to be alive; upon which the painter said, "One would imagine that the horse is a better judge of painting than your majesty."

marks with an interesting extract from Belzoni's travels, and a very pretty American poem called the 'Bucket;'—in continuation of the subject, we cite the following passage from *Dr. Richardson's Travels*, which gives a vivid picture of the distress occasioned by the *want of water*, in travelling over the desert of Suez. 'This had been (says our traveller) 'a most fatiguing day's ride under a burning sirocco wind from morning to night. We were afraid that the dreaded chamsin winds had set in; but our guide assured us, with the certainty of fate, that they would not commence for a fortnight. The poor pilgrims who were travelling with a small quantity of water, and anxious to husband it lest accident should detain us longer in the desert than we expected, or who carried no flask along with them, and had kept up with us a great way a-head of the camels, came toiling up with parched lips, flushed face, and turgid eyes, ready to start from their sockets, and begged, if we had any water, to give them a little to cool their mouths. It was impossible to be deaf to such a request, however much we might wish to husband our store; and yet there was no cause for apprehension; for we had more than enough; but under the idea that it would fall short, even those of the party who might be considered as the best entitled to indulge, had we been on short allowance, obstinately held out, and though pressed, and really in want of it, denied themselves the gratification, lest a more urgent period should arrive, when a drop of water would be called for as if to save a life. Often have I seen the flask of water pushed away by the hand when I well knew the parched throat required its quenching aid. It was impossible to see and not to admire the feeling and spirit that dictated the resolution, or ever to forget the countenance that spoke the need of the beverage that the hand put by.'

On our arrival at Gatsallakh we stopt in a low wind-swept valley, beside a precipitous sand-bank,

that towered above our heads to the height of 100 feet. Here, however, we were told there was water, though; to our longing and inexperienced eyes, every inch of surface was covered with dry sand, without the slightest indication of the fluid below. Our flasks were all drained, and we alighted, and laid ourselves down on the sand, wishing for the arrival of our camels to bring us a fresh supply. Meanwhile, as we were admiring the operations of the industrious beetle rolling his ball over the smooth surface of the desert, the shiekh of the caravan began to clear away the arenaceous accumulation from a very unlikely spot, which, however, soon discovered signs of water beneath. He then proceeded to deepen the excavation by basketing out the sand, singing at the same time an appropriate Arab tune to these words,—“*Allah a ma wil fater,*” and was answered in the same strain by the person who carried it away from him, “*El Moyé ta wil hater,*” which was interpreted to mean, “God, we give thee praise, and do thou give us water.” Thus they continued digging and singing for about ten minutes, when abundance of the wished for fluid flowed amain. At the joyful sight, men, women, dogs, and asses, all crowded round, eager to dip their lips in the wave. It was handed round, basin after basin, as fast as they could be emptied and filled. We all drank of it, and though it was muddy and brackish in the extreme, our first sentiment was that of universal approbation. “It is extremely good,” flowed from every tongue after it had tasted the water. We tried it a second time; but the voice of applause stuck in our throats, when the welcome sound of “the camels are arrived,” played upon our ears. On looking up, we saw them stretching their picturesque and graceful necks over the ridge of sand, and directing their march to a pleasant valley on the other side of the hill under which we were sitting. With the arrival of the caravan, fresh candidates for water came up to the

well, to whom we gave place, and proceeded to the other side of the mound to superintend and assist in forming our encampment. The fires were immediately lighted, the beasts of burthen unloaded, the tents pitched, and in a short time a comfortable dinner and a good glass of wine consoled us for the fatigues of the day.

'As the shades of night closed in upon us, the light of our fires gleamed back in reflection from the banks of sand with which we were surrounded; and the members of each small party collected round their little hearth, smoking their pipes, drinking their coffee, and reposing after their fatigues, presented a tranquil and happy prospect, and seemed to the spectator, at a distance, as if we had encamped in a focus of light. Last night's meditation held them mute; they had just entered on a journey which might be attended with suffering, and had not advanced sufficiently far to enable them to talk of their fatigues, or the probability of themselves or their animals holding out to its termination. But the vigour that remained after this day's fatigue roused their confidence, and produced conversation. At an early hour the Mussulman retired to his prayers; the Christian pilgrims, having assembled together, sang hymns of thanksgiving and praise, and all gave themselves to rest. *The desert is the spot in which man is all to his Maker and nothing to the world.*'— (*Travels*, vol. ii, p. 181.)

The *angler* is now busily engaged in his favourite pursuit;—but not so intensely occupied, we hope, as to be unable to steal a glance at the following *Poetical CUYP* :—

The MONK FISHING.

A mighty current, unconfined and free,
Ran wheeling round beneath the mountain's shade,
Battering its wave-worn base; but you might see
On the near margin many a wat'ry glade,

Becalm'd beneath some little island's lee
 All tranquil, and transparent, close embay'd;
 Reflecting in the deep serene and even
 Each flower and herb, and ev'ry cloud of Heaven;
 The painted *kingfisher*, the branch above her,
 Stand in the stedfast mirror fixt and true;
 Anon the fitful breezes brood and hover,
 Fresh'ning the surface with a rougher hue;
 Spreading, withdrawing, pausing, passing over,
 Again returning to retire anew:
 So rest and motion, in a narrow range,
 Feasted the sight with joyous interchange.
 The Monk with handy jerk, and petty baits,
 Stands twitching out apace the perch and roach;
 His mightier tackle, pitched apart, awaits
 The groveling *barbels* unobserved approach:
 And soon his motley meal of homeward cates
 Is spread; the leather bottle is a-broach—
 Eggs, Bacon, Ale, a Napkin, Cheese and Knife,
 Forming a charming Picture of Still-life.
 The Friar-fishing—a design for Cuyp,
 A cabinet jewel—'Pray remark the boot;
 'And, leading from the light, that shady stripe,
 'With the dark bulrush-heads how well they suit;
 'And then, that mellow tint so warm and ripe,
 'That falls upon the cassock and surtout:
 If it were fairly painted, puffed and sold,
 My gallery would be worth its weight in gold.

WHISTLECRAFT.

The *maritime plants* which flower in July, are the club rush (*scirpus maritimus*), bearded cat's-tail grass (*phleum crinitum*), bulbous fox-tail grass (*alopecurus bulbosus*), the reflexed and creeping meadow grass (*poa distans & maritima*), the field eryngo (*eryngium campestre*), parsley water dropwort (*cenanthe pimpinelloides*), smooth sea-heath (*frankenja lavis*), and the golden dock (*rumex maritimus*); all of which are to be found in salt marshes.

On *sandy shores* may be seen the sea mat-weed (*arundo arenaria*), upright sea-lime grass (*elymus arenarius*), the sea lung-wort (*pulmonaria maritima*), the sea bind-weed (*convolvulus soldanella*), saltwort

(*salsola*), sea-holly (*eryngium maritimum*) ; prickly samphire (*echinophora spinosa*), and the sea-lavender (*statice limonium*), are found on maritime rocks ; and the sea pea (*pisum maritimum*) on rocky shores.

It is now the season for *bathing*, a refreshment too little taken in this country either in summer or winter. —See T.T. for 1821, p. 209 ; and our last volume, p. 220, for a description of a summer bath at Negauristan in Persia.

In consequence of the excessive heat which is sometimes experienced in July, an evaporation takes place from the surface of the earth and waters, which again falls in frequent showers : these are as rapidly succeeded by a bright sun, and often by a beautiful rainbow.—See our last volume, p. 221.

Mild-arch of promise ! on thy evening sky
 Thou shinest fair with many a lovely ray
 Each in the other melting. Much mine eye
 Delights to linger on thee ; for the day,
 Changeful and many weathered, seemed to smile
 Flashing brief splendour thro' its clouds awhile,
 That deepened dark anon and fell in rain :
 But pleasant it is now to pause, and view
 Thy various tints of frail and watery hue,
 And think the storm shall not return again.
 Such is the smile that Piety bestows
 On the good man's pale cheek, when he in peace
 Departing gently from a world of woes,
 Anticipates the realm where sorrows cease !

SOUTHEY.

The months of *July* and *August* offer to those who are fond of the water opportunities for *rowing* and *sailing*. It is delightful, while skimming along the limpid element, impelled and fanned by the cooling breezes, to contemplate all the tribes of aquatic and semi-aquatic plants, the reeds, flags, and rushes, the persicaria, the purple loosestrife, and the willow-herb ; but, above all, the pride of the river, the *water-lily*, the yellow and the white, spreading its broad leaves on the surface of the water, and expanding its flowers to the sun with a lustre which

'Solomon, in all his glory,' never equalled. But while we enjoy the beautiful objects which all-bountiful Nature presents to us on every side, let us not forget to 'point a moral,' as well as 'to adorn the tale' of our pleasures.

The lapse of *Time* and *Rivers* is the same,
Both speed their journey with a restless stream;
The silent *pace*, with which they steal away,
No wealth can bribe, no prayers persuaded to stay;
Alike irrevocable both when past,
And a wide ocean swallows both at last;
Though each resemble each in every part,
A difference strikes at length the musing heart:
Streams never flow in vain; where streams abound,
How laughs the land with various plenty crowned!
But *TIME*, that should enrich the nobler mind,
Neglected leaves a dreary waste behind.

Passing from river scenery to that of the blue and boundless OCEAN,—and supposing ourselves, for a moment, placed in some sequestered nook, near Shanklin, St. Laurence, or Bonchurch, in the charming VECTIS, 'this precious gem set in the silver sea,' or on any other part of the picturesque southern coast of England, we might chaunt, with the poet, the following pretty

INSCRIPTION for an ORATORY.

Fronting the ocean, but beyond the ken
Of public view and sounds of marm'ring men,
Of unhewn roots composed, and gnarled wood,
A small and rustic oratory stood:
Two mossy pines, high bending, interwove
Their aged and fantastic arms above.
In front, amid the gay, surrounding flowers,
A *dial* counted the departing hours,
On which the sweetest light of summer shone;
A rude and brief *inscription* marked the stone—

To count, with passing shade, the hours,
I placed the dial 'mid the flowers;
That one by one came forth and died,
Blooming and with'ring by its side.
Mortal, let the sight impart
Its pensive moral to thy heart.

Or, as the author of *Lalla Rookh* says, in a style somewhat more Anacreontic:—

Young Joy ne'er thought of counting hours,
Till Care one summer's morning
Set up, among his smiling flow'rs,
A DIAL, by way of warning.

AUGUST.

SEXTILIS was the antient Roman name of this month, being the sixth from March. The Emperor **Augustus** changed this name, and gave it his own, because in this month Cæsar Augustus took possession of his first consulship, celebrated three triumphs, reduced Egypt under the power of the Roman people, and put an end to all civil wars.

Remarkable Days

In AUGUST 1823.

1. — LAMMAS DAY.

THIS day, in the Romish church, is generally called *St. Peter in the Fetters*, in commemoration of this apostle's imprisonment. It is probably derived from an old Saxon term, signifying *Loaf Mass*; as it was customary for the Saxons to offer an oblation of loaves made of new wheat on Lammas day, as the first fruits of their new corn.

*1. 1821. — MRS. INCHBALD DIED.

She was one of those ladies whose literary talents reflected honour on her sex, and on the age and country in which she lived, especially in the department of novels and dramas. Her play of *Such Things are*, in which she portrayed, in a very able manner, the **PHILANTHROPIC HOWARD**, is one of the best dramatic pieces of the last fifty years.

6. — TRANSFIGURATION.

Though this day was observed in remembrance of

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our Lord's *Transfiguration* on the Mount, by the primitive Christians, yet it is but of recent date in the church of Rome; as it was not instituted by Pope Calixtus until the year 1455.

7.—NAME OF JESUS.

Before the Reformation, this day was dedicated to *Afra*, a woman who had been converted to Christianity by Narcissus, Bishop of Jerusalem, and who afterwards suffered martyrdom; and the breviary was recognized by Paul V. Afterwards Donatus, who became a martyr in the time of Julian for refusing to sacrifice, was substituted in her place. Our reformers devoted it to the NAME OF OUR BLESSED LORD.

*7. 1821.—ADAM BARTSCH DIED.

Director in Chief of the Imperial Library at Vienna. This indefatigable connoisseur was well known to all print collectors by his valuable work, *Le Peintre Graveur*, in 20 volumes, 8vo, which is an important addition to the literature of that branch of the fine arts to which he more particularly devoted his time and talents. Just before his death he had completed another useful publication, in two volumes 8vo, *Anleitung zur Kupferstichkunde* (Introduction to the Study and Knowledge of Engravings); a work that may be considered as an excellent grammar of the art, and as affording much information within a small compass. His own etchings amount to 505. A portrait of Bartsch will be found in the third volume of Mr. Dibdin's entertaining Bibliographical Tour.

*8. 1822.—PERCY BYSSHE SHELLEY DIED, ET. 29.

Eldest son of Sir Timothy Shelley, Bart., of Castle Goring. He was sailing in a pleasure-boat off Reggio, when a sudden storm arose, the boat was upset, and he and his companion were drowned. Mr. Shelley was a man of talents of a very high order; and it is deeply to be regretted that the themes on which his resplendent muse chose to lavish all her powers are such as to render his poems quite unfit for indiscriminate perusal. In nerve and pith of con-

ception, he approaches more nearly to Lord Byron than any other of his contemporaries; while in many of his pieces he has touched, with equal mastery, the same softer strings of pathos and tenderness which respond so delightfully to the more gentle inspirations of Wordsworth, Coleridge, and Wilson. His fame would, indeed, have been a glorious plant, if he had not blasted its expanding leaves by the suicidal chillings of immorality. That Mr. Shelley was a poet is sufficiently proved by the two specimens given in this volume, and by the following piece:—if he had not been a poet, it would have been unnecessary to blame, and useless to praise him.

ON DEATH.

How wonderful is Death;
Death and his brother, Sleep!
One pale as yonder wan and horned moon,
With lips of lurid blue;
The other glowing like the vital morn,
When throned on ocean's wave
It breathes over the world:
Yet both so passing strange and wonderful!
Hath, then, the iron-scepter'd skeleton,
Whose reign is in the tainted sepulchres,
To the wild crew that crouch beneath his throne
Cast that fair prey? Must that divinest form,
Which love and admiration cannot view
Without a beating heart, whose azure veins
Steal like dark streams along a field of snow,
Whose outline is as fair as marble clothed
In light of some sublimest mind, decay?
Nor putrefaction's breath
Leave aught of this pure spectacle

Of a poem written in the 'hey-day of youth,' whose tendency is quite indefensible, it is but fair to say, that a few copies only were printed, many years since, for private circulation among his friends; and that a stray volume finding its way into the hands of a bookseller, mere profit got the better of every other consideration, and the work was, for the first time, given to the world, with all its 'imperfections on its head.' We have just heard that our friend Bernard Barton has produced a poem on Mr. Shelley's death; but we are now at press, and it is too late to give even a specimen.

But loathsomeness and ruin?—
 Spare aught but a dark theme,
 On which the lightest heart might moralize?
 Or is it but that downy-winged slumbers
 Have charmed their nurse, coy Silence, near her lids
 To watch their own repose?
 Will they, when morning's beam
 Flows through those wells of light,
 Seek, far from noise and day, some western cave,
 Where woods and streams, with soft and pausing winds,
 A lulling murmur weave?—
 Ianthe doth not sleep
 The dreamless sleep of death;
 Doth Henry hear her regular pulses throb,
 Or mark her delicate cheek
 With interchange of hues mock the broad moon,
 Outwatching weary night,
 Without assured reward.
 Her dewy eyes are closed:
 On their translucent lids, whose texture fine
 Scarce hides the dark blue orbs that burn below
 With unapparent fire,
 The baby Sleep is pillowed:
 Her golden tresses shade
 The bosom's stainless pride,
 Twining, like tendrils of the parasite,
 Around a marble column.

10.—SAINT LAWRENCE.

St. Lawrence was, by birth, a Spaniard, and treasurer of the church of Rome, being deacon to Pope Sextus, about the year 259. Soon afterwards, his bishop was killed by the soldiers of Valerian the emperor, with whom our saint would willingly have died. Lawrence refusing to deliver up the church treasure, which they imagined to be in his custody, he was laid upon a gridiron, and broiled over a fire. The celebrated palace of the Escorial is dedicated to this saint. See this described in T.T. for 1814, p. 199.

*10. 1813.—ANNE BURGESS DIED, ÆT. 49.

Endowed with very superior talents, she had cultivated them with an assiduity rarely paralleled, and

with a success of which probably there are few examples. Her mind appeared to possess powers suited to the acquirement of every species of knowledge which successively engaged her attention. There were few authors, antient or modern, whose writings were not familiarly known to her in their own idioms. With the Greek and Latin languages she was very conversant; and in those of more modern date her acquirements were still more considerable. Those of France, Italy, and Spain, she had so entirely mastered, that she read, spoke, and wrote them with a fluency and correctness hardly inferior to those of a native. Of German and Swedish she had not gained so extensive a knowledge, but she read them with facility. In all feminine pursuits she was equally successful; in all manner of needlework; in music, of which she was both a performer and composer; in drawing and painting, and in the art of etching. Distinguished, however, as she was in these various departments of science and accomplishment, she was yet more admirable for the evenness of her temper, for the suavity of her manners, and that modest retiredness of disposition which led her to shrink from the celebrity to which the extent and application of her talents so justly entitled her; for that pure and fervent devotion which governed her conduct through life, and enabled her to sustain, not only with patient resignation, but even with cheerfulness, the heavy dispensations of sickness and pain, by which her last years were embittered; for that zealous pursuit of truth, and almost enthusiastic adherence to the moral obligations on which all social order and good government are founded; and, above all, for her constant exercise of kindness towards her friends, and of charity towards all those within the sphere of her active benevolence. Possessing an easy though limited income, she invariably allotted a large portion of it to the relief of the necessitous, the succour of the aged and infirm, and

the virtuous education of the young. In the year 1800 she published, anonymously, *The Progress of the Pilgrim Good-Intent in Jacobinical Times*, an imitation of, or sequel to, *The Pilgrim's Progress* of Bunyan, having all the spirit of, but greater polish than the original. It was translated into German, by order of his late Majesty, by M. de Luc, who, went into Germany for the purpose of counteracting the effects of Jacobinical principles. At the death of Mrs. B. the *ninth* edition was published, with her name affixed: this excellent work is now in the supplementary catalogue of the Society for promoting Christian Knowledge. She published also three comedies, translated from the Spanish, and, we believe, other works.

12. 1762.—KING GEORGE IV BORN.

*12. 1822.—MARQUESS OF LONDONDERRY DIED,
ÆT. 52.

His character is thus ably and impartially portrayed by a celebrated contemporary writer. 'When we find (he observes) 'within the course of a very few years, no less than three eminently gifted members of the British senate struck, in the most high and brilliant state of their faculties, with a sudden and instantaneous blight of reason, and driven, by an almost momentary fit of insanity, to the unconscious act of self-destruction, we cannot but tremble at the frail tenure of those noble talents, which seem to form the most genuine and dignified objects of human pride. It is needless to dispute on the gradations by which the Noble Marquess, who now lies cold in death, ascended to his twofold distinction as a diplomatist and a debater, or to notice the censures which may have been passed on him in each of those characters; for it is enough to say, that in the House of Commons he was considered to discharge, with extraordinary tact and effect, the difficult office of a Parliamentary leader: and throughout the continent

of Europe he was looked up to as one of the ablest negotiators of the age. If we look to personal *honours*, which, though an ingenuous mind will perhaps rank them below the acquirements of talent and experience, are yet justly classed among the enviable distinctions of social life, how richly was his lordship endowed with these splendid gifts of fortune! To his own merits was probably owing the last elevation in the peerage conferred on his noble father, and transmitted to himself. Decorated with the highest domestic and many foreign orders, a cabinet minister, and a personal favourite of the most gracious of sovereigns, it was scarcely possible for him to desire any new title, or outward claim to the reverence of his fellow citizens. His personal appearance and deportment were well suited to his other distinctions; but he had better claims than any we have yet mentioned—to that peace of mind which one would have thought must for ever have shielded him from the dire calamity to which he fell a victim. Of high honour, fearless, undaunted, and firm in his resolves, he combined, in a remarkable manner, with the *fortiter in re*, the *suaviter in modo*. To his political adversaries (and he had no other) he was at once open, frank, unassuming, and consequently conciliating. Seldom was his temper ruffled, or his self-possession disturbed. He was happy in his union with a most amiable consort, and he was the pride of a venerated father. To his friends he was grateful for service, and firm in attachment; to his tenants and other dependants he was liberal and kind; to the poor, charitable and beneficent; to all, without distinction, candid, generous, and humane.

Such a man must have been regarded (and, indeed, the Noble Marquess was so by all who knew him) as the last person in the world to yield to nervous weakness, to lowness of spirits, or debility of mind. Nor was there any thing in the present conjuncture of affairs to call forth apprehension.

He fell not in the battle,
No tempest gave the shock,

The same man, who, amid the terrors of insurrection and treason, the fears of invasion, the mighty triumphs of an implacable enemy, and the arduous negotiations for the re-establishment of social order in Europe, had stood fearlessly and proudly erect,

With Atlantean shoulders fit to bear
The weight of mightiest monarchies;

the same man, in a time of calm and quietness, in the flower of his age, and with no prospect before him but that of continued and growing felicity, has been struck to the earth by a disorder as lamentable as it was unexpected. The accumulated effect of long years of toil, operating by slow but certain degrees, has developed itself in an instant, and the intellectual frame has fallen into ruins before any one could suspect that it was undermined. So frail is the edifice of human happiness here below! And these great and awful lessons are from time to time held out to us—not that we should undervalue the mighty obligations which we owe to the great men of our age; not that we ourselves should slacken our course in the path of public duty; but that we should know, and feel, that the true object of all our exertions here is placed in another and a better state of existence.

His remains were deposited in Westminster Abbey on the 20th of August.

15.—ASSUMPTION.

This is a festival in the Greek and Romish churches in honour of the supposed miraculous ascension of the Virgin Mary into heaven. The pageant in honour of the Virgin, formerly held in the archbishopric of Rouen, was established by Des Marêts, the governor of *Dieppe*, in 1448, in honour of the final expulsion of the English. The first master of the *Guild of the Assumption* was the founder of it, under whose auspices and direction it was conducted.

ed. About Midsummer the principal inhabitants used to assemble at the *Hotel de Ville*, or town-house of Dieppe, and there they selected the girl of the most exemplary character to represent the Virgin Mary, and with her six other young women, to act the parts of the daughters of Sion. The honour of figuring in this holy drama was greatly coveted; and the historian of Dieppe gravely assures us, that the earnestness felt on the occasion mainly contributed to the preservation of that purity of manners and that genuine piety, which subsisted in this town longer than in any other of France! But the election of the Virgin was not sufficient; a representative of St. Peter was also to be found among the clergy; and the laity were so far favoured, that they were permitted to furnish the eleven other apostles. This done, upon the 14th of August the Virgin was laid in a cradle of the form of a tomb, and was carried early in the morning, attended by her suite of either sex, to the church of St. Jacques; while before the door of the master of the guild was stretched a large carpet, embroidered with verses in letters of gold, setting forth his own good qualities, and his love for the holy Mary. Hither also, as soon as *Lauds* had been sung, the procession repaired from the church, and then it was joined by the governor of the town, the members of the guild, the municipal officers, and the clergy of the parish of St. Remi. Thus attended, they paraded the town, singing hymns, which were accompanied by a full band. The procession was increased by the great body of the inhabitants; and its impressiveness was still further augmented by numbers of the youth of either sex, who assumed the garb and attributes of their patron saints, and mixed in the immediate train of the principal actors. They then again repaired to the church, where *Te Deum* was sung by the full choir, in commemoration of the victory over the English, and high mass was performed, and the sacrament ad-

ministered to the whole party. During the service, a scenic representation was given of the Assumption of the Virgin. A scaffolding was raised, reaching nearly to the top of the dome, and supporting an azure canopy intended to emulate the 'spangled vault of heaven;' and about two feet below the summit of it appeared, seated on a splendid throne, an old man as the image of the Father Almighty, a representation equally absurd and impious, and which could alone be tolerated by the votaries of the worst superstitions of popery. On either side four pasteboard angels, of the size of men, floated in the air, and flapped their wings in cadence to the sounds of the organ; while above was suspended a large triangle, at whose corners were placed three smaller angels, who, at the intermission of each office, performed upon a set of little bells the hymn of *'Ave Maria gratia Dei plena per Secula,'* &c., accompanied by a larger angel on each side with a trumpet. To complete this portion of the spectacle, two others, below the old man's feet, held tapers, which were lighted as the services began, and extinguished at their close; on which occasions the figures were made to express reluctance by turning quickly about; so that it required some dexterity to apply the extinguishers. At the commencement of the mass, two of the angels by the side of the Almighty descended to the foot of the altar, and, placing themselves by the tomb, in which a pasteboard figure of the Virgin had been substituted for her living representative, gently raised it to the feet of the Father. The image, as it mounted, from time to time lifted its head and extended its arms, as if conscious of the approaching beatitude; then, after having received the benediction, and been encircled by another angel with a crown of glory, it gradually disappeared behind the clouds. At this instant a buffoon, who all the time had been playing his antics below, burst into an extravagant fit of joy; at one moment

clapping his hands most violently, at the next stretching himself out as if dead. Finally, he ran up to the feet of the old man, and hid himself under his legs, so as to show only his head. The people called him *Grimaldi*, an appellation that appears to have belonged to him by usage; and it is a singular coincidence, that the surname of the noblest family of Genoa the Proud, thus assigned by the rude rabble of a seaport to their buffoon, should belong of right to the sire and son, whose *mops* and *mowes* afford pastime to the upper gallery at Covent Garden.

Thus did the pageant proceed in all its grotesque glory; and, while

These laboured nothings in so strange a style
Amazed th' unlearned, and made the learned smile,

the children shouted aloud for their favourite *Grimaldi*; the priests, accompanied with bells, trumpets, and organs, thundered out the mass; the pious were loud in their exclamations of rapture at the devotion of the Virgin; and the whole church was filled with a hoarse and confused murmuring sound. The sequel of this, as of most other similar representations, was a hearty dinner.—(See *Mr. Dawson Turner's* very interesting *Tour in Normandy*, vol. i.)

*15. 1822.—THE KING VISITED SCOTLAND.

John Mayne, author of the 'Siller Gun' and many very pretty small pieces, with which we have, from time to time, enriched our previous volumes, has commemorated his Sovereign's visit to Edinburgh in a song quite worthy of the author,—and of a place in *Time's Telescope*.

GEORGE THE FOURTH AND A' THAT.

King George the Fourth is coming down
To see his friends in Embro-town;
To hold his Court, and wear the Crown
O' Scotland's Kings, and a' that:
And a' the Chieftains o' the North,
Lords, leddies, lairds, and men of worth,
Are flocking to the Firth o' Forth,
To welcome him, and a' that!

Whole days or ere he reached the land;
 A happy people, hand in hand,
 Were ranged for miles along the strand,
 Expecting him, and a' that !
 For though our Liege has kingdoms three,
 And mony any island in the sea,
 Auld Scotland tries to bear the gree,
 For loyalty, and a' that !

Meantime, wi' mony a bonny sang
 The streets and squares of Embro rang :
 Minstrels, and music-bells, ding-dang,
 Played loyal tunes, and a' that :
 On ilka house, frae street to street,
 On Calton-hill and Arthur's-seat,
 Where leddies perched, like angels sweet,
 On wings o' peace, and a' that !

At length, amid ten thousand cheers,
 Behold, the Royal Barge appears !
 And hither, as the squadron steers,
 Wi' gilded flags, and a' that,
 The joy-bells ring, the trumpets sound ;
 And now, while thund'ring guns rebound,
 ' God save the King ! ' is sung around,
 Wi' tears of joy, and a' that !

As nearer land the Monarch drew,
 Wi' shouts the welkin rung anew ;
 A louder blast the pipers blew,
 Saluting him, and a' that :
 His stately form, his gracefu' mien,
 Majestic, dignified, serene,
 Increased the grandeur o' the scene,
 And won our hearts, and a' that !

Thick as the leaves in Birnam Wood,
 Frae Leith, as far as Holyrood,
 The learned, the wise, the great, the good,
 The rich, the gay, and a' that ;
 Archers, and troops, wi' banners bright,
 Clansmen, and Celts, and Chiefs o' might,
 And Yeomanry, a glorious sight !
 Await their King, and a' that !

O, Scotia! Land of hills and lakes !
 Land o' the brave! sweet Land o' Cakes !
 Whene'er the King his pleasure takes
 Amang your tow'rs, and a' that,

Where'er he rests, where'er he moves,
 Regard him with your purest loves!
 And may his coming, like the dove's,
 Bring love and peace, and a' that!

Ah! mony a dowy day has been
 Since Scotland saw a King or Queen!
 Kingdoms and States, and Thrones, I ween,
 Ha'e been o'erturned since a' that!
 Yet SCOTLAND, without crack or flaw,
 Stands fast and firm, and ne'er shall fa'
 While Virtue, amang great and sma',
 Adorns her hairs, and a' that!

Then cock your bonnets, like a blade;
 And, busk it in your belted plaid,
 Let rites and honours due be paid
 To Royalty, and a' that:
 Though Kings and Queens of high renown
 Ha'e flourished aft in Emprer-town,
 A better never wore the crown
 Than GEORGE the Fourth, for a' that!

But, oh! while guns and cannons rear,
 And plaudits welcome him on shore,
 The heart is wounded to the core
 That we moun part, for a' that;
 Yet fill your goblets till they foam;
 And when the King's disposed to roam,
 He'll look on Scotland as his home,
 And come again, and a' that!

His Majesty left Scotland on the 29th of August, embarking at Port Edgar, the royal yacht being towed by the *James Watt* steam-packet. At six o'clock P.M., a salute from the batteries announced that the royal squadron was at sea, and the wind was as favourable as could be desired. The royal fleet arrived at Greenwich on the 1st of September, at nearly the same hour it had quitted its moorings on the 10th of August.—A complete historical detail of this event, with all its attendant circumstances, will be found in *Blackwood's Magazine for September 1822*, nearly the whole number (140 closely printed column pages) being dedicated to the subject. We have only room for

**L'Enboy,
TO THE KING.
Christopher North.**

HERE CLOSE WE FOR THE PRESENT! THIS, O KING!,
THIS NUMBER DO WE DEDICATE TO THEE,
LOWLY AND REVERENTLY ON BENDED KNEE,
OUR LOYAL TRIBUTE HUMBLY OFFERING.
WHILE WE HAVE HAND TO WRITE, OR VOICE TO SING,
WHILE WE HAVE MASTERY OF VERSE AND PROSE,—
IN SHORT, WHILE THROUGH OUR HEART THE LIFE-
BLOOD FLOWS,
SIMILAR TRIBUTE SHALL WE JOY TO BRING.
AND THOUGH OLD AGE HATH LAID UPON OUR HEAD
THE SNOW OF THREESCORE WINTERS, YET, IF E'ER
NEED SHOULD ARISE—IF DAYS OF DOUBT AND DREAD
SUMMON US IN THY CAUSE, THE FIGHT TO DARE,
AGE-STRICKEN AS WE ARE, WE FORTH SHOULD FARE,
OUR BLOOD, AS CRIMSON AS OUR TYPE, TO SHED!

***20. 1547.—THE FIRST BOOK OF HOMILIES,**
Published by Cranmer. This, together with the second Book, published in 1563, however obsolete it may have become in some respects, is nevertheless a most valuable standard of the doctrines of the Church of England; and it is well deserving of that fresh circulation which has been given to it of late years by the Institution of the Prayer Book and Homily Society, and by the Society for promoting Christian Knowledge admitting it into their catalogue; both Societies, too, have printed the Homilies in separate tracts, so that they bid fair to be more generally diffused and known in the nineteenth century, than they were in the sixteenth.

24.—SAINT BARTHOLOMEW.

The word Bartholomew means the son of Tolmai, or Tolomæus, the name of a family among the Jews,

mentioned by Josephus. He preached the Gospel in Armenia, converted the Lycaonians, and afterwards visited India. Some authors assert that he was crucified, like St. Peter, with his head downwards; others, however, with more probability, say, that he was flayed alive, by order of Astyages, King of Armenia.—On the massacre of St. Bartholomew, see T.T. for 1821, p. 217.

*25. 1822.—SIR W. HERSCHEL, KNT., LL.D., F.R.S.,
LOND. AND ED., DIED, ÆT. 83;

President of the Astronomical Society; and Member of nearly all the principal scientific bodies of Europe and America. This distinguished astronomer was born at Hanover, November 15, 1738; his father being a musician, brought up his four sons, of whom Sir William was the second, to the same profession, and placed him, at the age of fourteen, in the band of the Hanoverian Foot Guards. Unable, however, long to endure the drudgery of such a situation, and conscious of superior proficiency in his art, he determined on quitting the regiment, and seeking his fortune in England, where he arrived about the year 1757. After struggling with great difficulties in London, he was engaged by the Earl of Darlington to superintend and instruct a military band then forming by that nobleman in the county of Durham; and the opening thus afforded contributed so far to increase his reputation and connexions, as to induce him to spend several years after the termination of this engagement in the neighbourhood of Leeds, Pontefract, Doncaster, &c., where he had many scholars, and led the public concerts and oratorios.

In 1766 he was chosen *organist* at Halifax, a situation he soon after resigned for the more advantageous one of organist to the Octagon Chapel at Bath. In this great and gay resort of fashion, his extraordinary musical talents procured him ample employment; and the direction of the public con-

certs, and his private teaching, produced him a considerable income.

But though fond to enthusiasm of his profession, his ardent thirst for knowledge had begun for some time past to open a nobler field for his exertions. While at Halifax, he had commenced a course of mathematical reading; and in spite of the difficulty of such studies, acquired, without assistance, a considerable familiarity with the principles both of pure and applied mathematics. The sublime views disclosed by modern astronomy had powerfully attracted his attention; and when he read of the noble discoveries made by the assistance of the telescope, he was seized with an irresistible desire to see with his own eyes the wonders of which he read. *Fortunately* the price of an instrument capable of satisfying his curiosity was beyond his means, and he resolved to attempt the construction of one for himself. In this arduous task, after encountering endless difficulties, he succeeded; and in 1774 first saw Saturn in a five feet reflecting telescope, made by his own hands. Encouraged by this success, he now attempted larger telescopes, and soon completed a seven, a ten, and a twenty feet reflector; labouring with such obstinacy, as to have actually finished no less than 200 object mirrors before he could satisfy himself with the performance of one.

Astronomy now occupied so much of his attention, that he began to limit his professional engagements, and restrict the number of his scholars. About the latter end of 1779, he commenced a regular review of the Heavens, star by star, with a seven feet reflector; and having already continued this upwards of eighteen months, he was at length rewarded, on the 13th of March 1781, with the discovery of a new primary planet, to which he afterwards gave the name of *Georgium Sidus*, now more generally distinguished by that of Uranus.

In consequence of this memorable discovery, the

attention of the scientific world became fixed upon him; and his late Majesty, with a promptitude of liberality which must ever be recorded to his honour as a patron of science, enabled him, by the settlement of a handsome salary, to discontinue his professional exertions, and devote the remainder of his life wholly to astronomy. Herschel now quitted Bath, and took up his residence at Datchet, in the neighbourhood of Windsor, where he was no sooner established, than he entered on a career of discovery, unexampled, perhaps, in the history of science. Having removed to Slough, he commenced the erection of a telescope of yet larger dimensions than any before attempted, which he completed in 1787; and aided by this stupendous instrument, and by others of hardly inferior power, he extended his researches to every part of the heavens, penetrating into regions of space of a remoteness eluding calculation, and developing views of the construction of our own system and the universe, of a daring sublimity, hardly more surprising than the strictness of the induction on which they rest. In these observations, and the laborious calculations into which they led, he was assisted throughout by his excellent sister, Miss Caroline Herschel, whose indefatigable and unhesitating devotion in the performance of a task usually deemed incompatible with female habits, surpasses all eulogium.

Sir W. Herschel's discoveries were communicated as they arose to the Royal Society, and form an important part of the published transactions of that learned body from the year 1782 to 1818: many of these discoveries are detailed in the early volumes of *Time's Telescope*.

As an astronomer, Sir W. Herschel was surpassed by no one of the present age; and the depth of his scientific researches, and the extent of his observations, rendered him, perhaps, second only to the immortal Newton. He was interred in Upton

Church, Berks, in which parish he had resided for many years. He has left one son, who, with his father's name, inherits his distinguished talents.

28.—SAINT AUGUSTINE.

Augustine was born at Thagaste, a town in Numidia, in the year 354. He was a judicious divine, and the most voluminous writer of all the Fathers. He died in 430, at the age of seventy-seven.

29.—JOHN BAPTIST BEHEADED.

This day was formerly denominated *Festum Collectionis Sancti Johannis Baptistæ*; or the feast of gathering up St. John the Baptist's relics; but afterwards, by corruption, *Festum Decollationis*, the festival in remembrance of his being beheaded. His nativity is celebrated on the 24th of June, which see.

Bishop Hall, in his *Contemplation on John Baptist beheaded*, after speaking of his death, breaks out, 'O happy birth-day, not of Herod, but of the Baptist! Now doth John enter into his joy; and, in his name, is this day ever celebrated of the church. This blessed forerunner of Christ said of himself, *I must decrease*. He is decreased indeed, and now grown shorter by the head; but he is not so much decreased in stature, as increased in glory. For one minute's pain, he is possessed of endless joy; and, as he came before his Saviour into the world, so he is gone before him into heaven!—He afterwards adds, 'Oh! the wondrous judgments and incomprehensible dispositions of the holy, wise, Almighty God! He, that was sanctified in the womb, born and conceived with so much note and miracle, (*what manner of child shall this be?*) lived with so much reverence and observation, is now, at midnight, obscurely murdered in a close prison, and his head brought forth to the insultation and irrision of harlots and ruffians. O God! thou knowest what thou hast to do with thine own: thus thou sufferest thine to be misused and slaughtered here below, that thou

mayest crown them above. It should not be thus, if thou didst not mean that their glory should be answerable to their depression.'—(*Works, by Pratt*, vol. ii, p. 324.)

Astronomical Occurrences

IN AUGUST 1823.

SOLAR PHENOMENA.

THE Sun enters Virgo at 24 m. past midnight of the 23d. He will also be eclipsed on the 6th, but the eclipse will be *invisible* in this country, as the following are the circumstances under which it will happen:—

Conjunction at 1 h. 53 m. 15 s.
In longitude ... 4 s. 13° 14'
Moon's latitude 1° 24' 45" South.

The Sun will also appear and disappear, during the same period, as in the following

TABLE

Of the Sun's Rising and Setting for every fifth Day.

August 1st, Sun rises 20 m. after 4.	Sets 40 m. after 7
6th, 27 4 33 7	
11th, 35 4 25 7	
16th, 44 4 16 7	
21st, 53 4 7 7	
26th, 2 5 58 6	
31st, 12 5 48 6	

Equation of Time.

The following Table shows the quantities that must be added to solar time to obtain that which should be indicated by a well-regulated clock at the same instant; and, consequently, if the hour indicated by the clock do not agree with the calculation after this correction is made, it will require to be put to that time, and regulated accordingly. The correction for any intermediate day or hour may

readily be found by proportion, and applied in the same manner. The equation is given for noon of the respective days.

TABLE
Of the Equation of Time for every fifth Day.

		m.	s.
Friday, August 1st, to the time by the dial	add	6	0
Wednesday, ... 6th,		5	38
Monday, 11th,		5	1
Saturday, 16th,		4	9
Thursday, ... 21st,		3	4
Tuesday, 26th,		1	46
Sunday, 31st,		0	20

LUNAR PHENOMENA.

Phases of the Moon.

New Moon, 6th day, at 53 m. past 1 in the afternoon	
First Quarter, 13th	20
Full Moon, 21st	41
Last Quarter, 29th	17

Moon's Passage over the Meridian.

Such of our young readers as wish to observe the Moon in her passage over the meridian this month, may have an opportunity on the following days, provided the weather prove favourable, viz.

August 14th, at 32 m. past 6 in the evening	
15th, ... 23	7
16th, ... 14	8
17th, ... 4	9
18th, ... 52	9 at night
19th, ... 38	10
20th, ... 23	11
29th, ... 40	5 in the morning
30th, ... 41	6
31st, ... 43	7

PHENOMENA PLANETARUM.

Phases of Venus.

This beautiful planet now presents one of the most pleasing telescopic views which the heavens afford. Her brightness increases rapidly. Her appearance is nearly that of a half moon. Her colour is a fine white light, and her surface is diver-

sified with spots, by which the time of her revolution on her axis is ascertained.

August 1st, { Illuminated part = 5.78537 digits
Dark part = 6.21463

Eclipses of Jupiter's Satellites.

As Jupiter now recedes from the Sun, more and more of his satellites become visible; though only the following three of these phenomena fall under our notice this month:—

Immersions.

First Satellite, 11th day, at 16 m. 38 s. after 3 in the morning
27th 32 . . 38 1
Second Satellite, 7th 25 . . 38 3

TABLE

Of the Transits and Meridional Altitudes of the Planets.

	1st	7th	13th	19th	25th
TRANSITS.					
Mercury	h. m. 11 14 <i>mor.</i>	h. m. 11 42	h. m. 0 9 <i>aft.</i>	h. m. 0 31	h. m. 0 49
Venus	2 54 <i>aft.</i>	2 51	2 46	2 41	2 34
Mars	9 47 <i>mor.</i>	9 41	9 36	9 30	9 25
Jupiter	9 19 <i>mor.</i>	9 1	8 43	8 25	8 8
Saturn	6 42 <i>mor.</i>	6 20	5 58	5 37	5 16
G. Sidus	9 52 <i>aft.</i>	9 28	9 4	8 42	8 18
ALTITUDES.					
Mercury	60° 8'	57° 58'	54° 31'	50° 19'	45° 48'
Venus	40 15	37 34	34 38	31 57	29 24
Mars	62 21	62 9	61 50	61 25	60 54
Jupiter	61 39	61 39	61 38	61 37	61 35
Saturn	54 49	54 53	54 56	54 58	54 59
G. Sidus	14 55	14 54	14 54	14 53	14 53

Other Phenomena.

Venus will obtain her greatest elongation on the 1st of this month. The Moon will be in conjunction with Mars at 48 m. after 6 in the morning of the 4th; with α in Scorpio, at 24 m. past midnight of the 14th; and with Georgium Sidus, at 23 m. past 2 in the afternoon of the 17th. Mercury will be in his superior conjunction at midnight of the 11th; he

will also be in conjunction with α in Leo on the 15th; when the planet will be $74\frac{1}{2}'$ north of the star. Saturn will likewise be in quadrature at a quarter past 7 in the morning of the 17th.

REFLECTIONS ON THE STARRY HEAVENS.

[Continued from page 201.]

On turning our eyes to the heavens, one of the first sensations we experience arises from the different apparent magnitudes or brightness of these celestial bodies. When the Sun has sunk below the western horizon, and we watch the diminution of twilight, some of the most prominent stars soon begin to protrude their scintillating rays through the waning day; and these are followed by others of an inferior lustre, till the multitude rapidly increases, as the departing day retires. But it is only when the twilight has wholly disappeared, and the Moon is hid beneath the horizon, that the smallest stars that are visible to the naked eye can be seen. Astronomers have arranged the stars in eight classes. The largest and brightest are called stars of the 1st magnitude; the next in lustre, stars of the 2d magnitude; the next in brilliancy, stars of the 3d, and so on to the 8th; but the 7th and 8th classes cannot be seen without the assistance of telescopes. The number of stars in each of the six magnitudes that fall within the scope of the naked eye, have been estimated as follows, viz.

1st,	2d,	3d,	4th,	5th,	6th,	Total.
20	76	223	510	695	1604	3128

Though these celestial bodies are called *fixed stars*, in distinction from the planets and comets, which are constantly and visibly changing their places, they are not absolutely without motion in reference to each other. Several of them have been found, from a comparison of very correct observations made at distant periods, to have varied their

places. *Arcturus*, for instance, has a progressive motion amounting to more than two seconds annually. Dr. Maskelyne also found, that, of the thirty-six stars of which he determined the places with great correctness, thirty-five of them were subject to variation; and, in catalogues of the stars, this annual difference of their positions is generally annexed with the sign *plus* or *minus*, showing whether it is to be added to, or subtracted from, the numbers previously given.

Here let the young astronomer pause, and reflect to what these observations lead him. The stars, shining by their own light, have been conceived by many able astronomers to be suns, each forming the centre of a system, and having its planetary bodies revolving round it, like those in the system to which the earth belongs. As we know that Infinite Wisdom cannot create any thing in vain, it is reasonable to conclude that all these bodies are the abodes of intelligent beings, equally capable of enjoying their Creator's bounties, and reflecting their Maker's praise. When, in addition to this, we reflect upon the immense distances they are from us, that myriads of these suns exist far beyond the utmost power of mortal art to view, and even so distant that their light (notwithstanding its amazing velocity) may not have reached us since the creation of the world; this presents a view of the works of the great CREATOR too august for the human mind adequately to conceive. Instead of one sun, and one world, as the uninstructed and unreflecting generally suppose, we must admit an expanse so boundless, filled with suns and systems so infinite, that, were our Sun and his whole attendant train annihilated, by the Word of the same Power who called them into existence, it would not be missed by an eye that could take in the whole universe. This idea the poet exemplifies, when he says,

One single system is as nought in estimate
 When balanced with the heavens : greater the speck
 Which on the sun-beam dances, when compared
 With Taurus, or the Alps, or Caucasus ;
 Or on the blade the dew-drop to the sea.

If millions of suns at inconceivable distances from each other, attended by tens of millions of worlds, all revolving round them with incalculable rapidity and inexpressible harmony, and peopled by millions of millions of rational beings formed for endless felicity ; if thus

The Great Sovereign sends ten thousand worlds
 To tell us HE resides above them all,
 In glory's unapproachable recess ;

YOUNG.

may we not justly exclaim with another poet, in reference to the great Author of their existence, without participating in the Platonic sentiment his excellent lines express :

Hail ! Source of Being ! Universal Soul
 Of heaven and earth ! essential Presence, hail !
 To THEE I bend the knee, to THEE my thoughts
 Continual climb, who with a master hand
 Hast the great whole into perfection touched !

THOMSON.

Nor is this magnificent spectacle confined to one age or one country : wherever man exists it is equally visible ; and the language of David, '*The heavens declare the glory of God, and the firmament showeth his handy-work,*' was not more applicable in his day than in ours. Yes ; the same stars which shed their radiance on the antediluvian world still shine with undiminished brightness, and shall only be extinguished at the final consummation of all things, when '*The heavens shall pass away with a great noise, and the elements shall melt with fervent heat.*' This idea of immutability is finely illustrated in Gillespie's '*Seasons contemplated in the Spirit of the Gospel,*' where he says, '*The stars which arrested the attention and directed the motions of the*

antient Patriarch, in his desert migrations with his flocks and his herds,—the constellations which rose upon the adventurous bark of the Phœnician, as he boldly braved the uncertainty and turbulence of the Adrian wave; the same twilight Hesperus, whose ascent taught the shepherd of Syria to pen his flocks, and secure his fold,—the same undiminished Light which rose in beauty upon Eden, and in all the gleam of fiery indignation over the devoted cities of the plain,—the same sister Luminary, whose withdrawals and renewals have interested the feelings and commanded the oblations of successive and countless generations,—these eternal demonstrations of God remain still the same, declaring from age to age, that, while subordinate objects are exposed to alteration and change, in form and composition, there is, behind the whole of this passing system, an Essence, and an Existence, which is fixed and immutable.’

The Naturalist's Diary

For AUGUST 1823. .i

SUMMER and Winter, day and night, shall not cease.—GEN. viii, v. 22.

THE rich and glowing scenes of summer are now spread abroad in all their attractive magnificence; fields of waving corn, presenting to the eye a sea of elegant bending stems,—the embrowned surface of vegetation,—and the full-leaved forest trees bowing their stupendous heads to the wind,—the orchards and gardens teeming with golden fruit, and produce of almost every tint—form a picture at once grand and delightful. ‘But upon all this goodly scene of summer—joy, and festivity,’ (observes a powerful writer) ‘there is a “MENE” of departing glory

ⁱ Dan. v, 26.

legibly inscribed. History has preserved the record of his conduct, who wept over the limited extent of universal conquest:—and after the great plan of nature has actually been accomplished, and nothing more of growth or decoration remains to be exhibited, —and the very next stage conducts inevitably and invariably to decay and dissolution, is it not natural for man to experience a like sentiment of vacuity and disappointment? During the winter season the seeds lay buried in the earth, and we consoled ourselves by the anticipation of spring. In spring, too, we were pleased and gratified by the reflection that there still remained another stage of advance towards maturity. But on the establishment of summer, when the year is at length crowned with accomplishment, the heart sickens at the chilling reflection that nothing further can be looked for!—How curiously was the plant formed which sprung up into maturity before us! How variegated with colour, and shape, and elegance, were the leaf, and the bud, and the flower! To impart strength, and secure progression, and a full development of character, the west wind blew kindly—the earth lent her nourishing juices—the sun returned from his distant excursion—and the whole agency of nature appeared to be overruled and directed. But now that the shrub has attained its destined growth—that the finishing touch has been put to the object of so much aim and arrangement, the sun has commenced his retreat. Decay approaches; the process is henceforward reversed; and down again to the dust, by inches and by hours, must descend the hope of spring and the pride of summer!

The powerful influence of the solar rays now contributes to ripen the various sorts of grain which are benevolently given for the food of man and cattle. The time of commencing the harvest and the manner of taking it vary in different districts, as do the ceremonies, now almost extinct, which are observed

at its conclusion'. In Scotland it is usual for the women to reap as well as the men. They choose their partners for the harvest; each by the lass he loves, has his station in the field—the maid takes part of the reap, and goes on before, leaving what corn she cuts in small heaps, called *cats*, which when her partner comes up, he adds to the sheaf; the whole business being enlivened by the occasional song of hope and merriment:—

Such have I heard in Scottish land,
Rise from the busy harvest band;
When falls before the mountaineer,
On lowland plains, the ripened ear.

WALTER SCOTT.

In ancient times, persons were allowed to *glean* in orchards and vineyards, as well as in corn-fields. Esdras seems to allude to this custom:—*In an orchard of olives, upon every tree there are left three or four olives; when a vineyard is gathered, there are left some clusters for them that diligently seek through the vineyard.*—Book II, chap. xvi, v. 29, 30.

An interesting account of an *Italian harvest*, in the neighbourhood of Rome, is given by Mrs. Graham, in her recent work descriptive of that country. 'The wheat is reaped towards the end of June, and throughout July, ten days later than the harvest of the Campagna. As soon as a large field, or two or three adjoining fields, are reaped, a threshing floor is prepared, and the grain is trodden out by horses; so that it is threshed before it is stored, or even removed from the field; a practice that could not obtain in our uncertain climate. The clayey nature of the soil renders Virgil's precept, to

Delve of convenient depth your threshing floor,
With tempered clay then fill and face it o'er*,

* For an account of the manner of taking the harvest in Switzerland, consult our last volume, pp. 234-236.

* Dryden's Virgil, Georg. I. v. 258. We saw threshing floors, such as Virgil describes, in the neighbourhood of Naples.

unnecessary. Here a piece of ground in the highest and driest part of the field is first smoothed with a hoe, and then swept very clean. If the crop be small, it is threshed with a flail; if otherwise, horses are used to tread it out. We have seen from ten to fourteen on one floor. The corn is winnowed on the spot, by means of a sieve supported on poles, and the chaff burned forthwith.

'*Harvest-home*, as with us, is a time of universal merriment. It is generally celebrated with a dance, when cakes, called *ciambelli*, made of fine flour, oil, and honey; and others, called *pizzi*, made of barley, well salted, are distributed, with a good allowance of wine. If the harvest has been plentiful, a large sheaf is generally reserved for some favourite saint, as the offering of first-fruits among the Hebrews was *corn beaten out of full ears* (Levit. ii, 14). The reapers carry it along; the priest meets them, a prayer of dedication is said, the sheaf is placed before the altar. We had the pleasure of seeing the little church of Santa Maria delle Grazie so adorned; and whether it be the remain of pagan rites, or the natural expression of pious gratitude, acting alike under different laws and in different ages, we were too well pleased to inquire. We have seen the poor Hindoo place his cocoa-nut and his handful of rice before his household gods. We read of the elegant offerings of odorous flowers and fruits made by Catullus to the rural guardian of his vineyard; but none of these pleased us so much as the plentiful sheaf given by the Christian Polese to the Madonna delle Grazie.'

About the 11th of August, the puffin (*alca arctica*) migrates; and soon afterwards the swift disappears, probably winging its way to more southern regions. Young broods of goldfinches (*fringilla carduelis*) are now seen; lapwings (*tringa vanellus*) and linnets (*fringilla linota*) congregate; the nuthatch chatters.

At the beginning of August, melilot (*trifolium officinale*), rue (*ruta graveolens*), the water parsnip (*sysimbrium nasturtium*), horehound (*marrubium vulgare*), water-mint (*mentha aquatica*), the orpine (*sedum telephium*), and the *gentiana amarella*, have their flowers full blown. The purple blossoms of the meadow saffron (*colchicum autumnale*) now adorn the low, moist lands. The vinous infusion of its root forms a celebrated remedy for that excruciating malady, the gout; it has been also used with success in chronic rheumatism.

The *geranium* tribe now add to the beauty of the garden, and many pretty species also decorate our sunny banks: the malvaceous order, which abound with mucilage, and the spurge (*euphorbia*), with their acrid milky juices, bearing the seed always elevated on the flower, are seen in great variety. The *genista* or broom flowers in this month; and the common flax (*linum usitatissimum*), with its pretty pale blue flowers, while it is allowed to ornament the garden, reminds us of *utility* as well as *beauty*.—Nor must we forget to name the stately *helianthus*, at once majestic and faithful, the *lion* of flowers:—

To the SUN FLOWER.

Behold, my dear, this lofty flow'r
That now the golden Sun receives;
No other deity has pow'r,
But only Phœbus, on her leaves;
As he in radiant glory burns,
From east to west her visage turns.

The dial tells no tale more true,
Than she his journal on her leaves,
When morn first gives him to her view,
Or night, that her of him bereaves,
(A dismal interregnum) bids
Her weeping eyes to close their lids.

Forsaken of his light, she pines
The cold, the dreary night away,

X 2

Till in the east the crimson signs
 Betoken the great God of day ;
 Then, lifting up her drooping face,
 She sheds around a golden grace.

O Nature, in all parts divine !
 What moral sweets her leaves disclose !
 Then in my verse her truth shall shine,
 And be immortal as the rose,
 Anacreon's plant : arise, thou flow'r,
 That hast fidelity thy dow'r !

Apollo, on whose beams you gaze,
 Has filled my breast with golden light ;
 And circled me with sacred rays,
 To be a poet in his sight :
 Then thus I give the crown to thee,
 Whose impress is fidelity. LORD THURLOW.

The nest of the harvest mouse (*mus messorius*) may now be found attached about midway to the straws of some vegetables in our corn-fields ; they are very fond of fixing it to those of beans or peas, with which it sways backwards and forwards, when they are agitated by the wind : it is the only English mouse that elevates its nest above the ground ; they are sometimes found in the shape of a pear with a long neck, at others round, the size of an orange, and may be seen with commonly eight young ones in them, as late as the middle of September: these little creatures so perfectly fill the nest, that no room seems left for the maternal visitor, yet in this crowded ball she suckles them with perfect ease.— This mouse is not an inhabitant of every county, but is not uncommon in dry situations: they are the least of all our quadrupeds, an old one generally weighing about 1 drachm 5 scruples, nor can any creature be more innocent and harmless: in winter they congregate under some dry bank, or take shelter beneath a bean or pea-stack in our farm-yards.

Insects still continue to swarm ; they sport in the sun from flower to flower, from fruit to fruit, and

subsist themselves upon the superfluities of nature. It is very amusing to observe, in the bright sun of an August morning, the animation and delight of some of our lepidopterous tribes. That beautiful little blue butterfly (*papilio argus*) is then all life and activity, fluttering from flower to flower in the grass with remarkable vivacity: there seems to be a constant rivalry and contention between this beauty, and the not less elegant little beau *papilio phlæas*.— See our last volume, p. 238, and T. T. for 1820, p. 205. Respecting the extraordinary increase of the *helix virgata*, and the pretended *shower of snails*, consult T. T. for 1822, pp. 238, 239.

The harvest-bug (*acarus ricinus*), in this and the following month, proves a very troublesome and disagreeable insect, particularly in some of the southern counties of England. The best cure for the bite is *hartshorn*. Flies now abound, and torment both men and animals with their perpetual buzzing.— *Wasps* also become very troublesome.— See our last volume, p. 240. Another unpleasant insect which abounds in August, is the *tabanus pulvialis*, sticking on the hands and legs, and, by piercing the skin with its proboscis, causing a painful inflammation. Cattle are severely exposed to its attacks.

For these temporary annoyances, however, we are in some measure compensated by the presence of the *lady-bird*, and the *glow-worm*¹, the first for its

¹ *To the GLOW-WORM.*

While the bright colours slowly melt away,
That late the western clouds so richly dight,
And gradual darkness steals upon the light,
Through flow'ry vales and groves I love to stray,
And silent mark the *glow-worm's* kindling ray,
That mid the dunnest walks, and deepest glooms,
The long dank grass with greenish light illumines;
And glads the eye, and cheers the dusky way.
Though now it spread a radiance through its sphere,
'Twas pale by day, unheeded and unseen;

utility, and the second for the beautiful effect it produces. The lady-bird, or lady-cow, so often charged with being the cause of blights in apple-trees, is, in reality, the best remedy against that disease; as both when perfect, or in its larve state, it feeds entirely upon the *aphis*, a genus of which the blight in question is a species: hence the lady-bird may be frequently seen in the cankered spots of apple-trees; not indeed sucking their nutritious juices, but devouring the real enemy of the future hopes of the orchard. In the *hop-countries* the lady-bird is not less useful, as it is well known to destroy the blight which does so much injury to that delicate plant. Let us then, instead of destroying this beautiful insect, greet our benefactor with a song: it is an address to the lady-bird, from the *German*, of which we have in England preserved only the second verse.

Lady-bird! Lady-bird! pretty one, stay,
Come sit on my finger, so happy and gay,
With me shall no mischief betide thee;
No harm would I do thee, no foeman is here,
I only would gaze on thy beauties so dear,
Those beautiful winglets beside thee.

Lady-bird! Lady-bird! fly away home,
Your house is on fire, your children will roam,
List! list! to their cry and bewailing!
The pitiless spider is weaving their doom,
Then Lady-bird, Lady-bird, fly away home,
Hark! hark! to thy children's bewailing!

Fly back again, back again, Lady-bird dear;
Thy neighbours will merrily welcome thee here,
With them shall no peril attend thee;
They'll guard thee so safely from danger or care,
They'll gaze on thy beautiful winglets so fair,
They'll love thee, and ever befriend thee.

Thus humble Virtue oft may dim appear,
When gaudy Fortune spreads her dazzling sheen;
But in the gloom of drear Affliction's night,
While all is dark around, she shines in native light.

REV. J. BLACK.

The solitary bee (*apis manicata*), and the white moth (*phalæna pacta*), are observed in this month: the *ptinus pectinicornis* also makes its appearance, the larvæ of which are very destructive to wooden furniture, boring holes in tables, chairs, bed-posts, &c.

The southern counties of England, particularly Surrey and Kent, yield their valuable produce of hops in this month; when a busy scene presents itself: the men drawing the hop-poles out of the earth; the women taking their loaded stems; and the children picking the clusters off the plants, and throwing them into baskets. The common hop (*humulus lupulus*) is propagated either by nursery plants, or by cuttings.

In this month, London (and indeed every other great town), pours out its thousand tourists, who, by the aid of the almost countless break-necks, high-flyers, velocifères, and STEAM COACHES¹ (for one is

¹ Imagine the surprise of an Englishman coming to London (from a tour in *Terra incognita*) in the year 1843! By that time, the adoption of the new plan will be universal, and every description of wheel carriage will be propelled by the aid of steam. What an interesting change will have taken place in the aspect and arrangements of the metropolis! *Fuel*, not horses, being the medium of impulse, the property of all public vehicles will naturally have changed hands; the Golden Cross, the Bull-and-Mouth, the Bolt-in-Tun, and the Cross Keys, will have ceased to exist; and the stage coaches will be found setting off probably from the magazines of our leading coal merchants—from Old Barge House, Broken Wharf, Custom House Quay, and the dark arch under the Adelphi. Then the change in the detail of the road will seem very whimsical at first. Instead of calling, as now, for fresh horses at a post-town, we shall have only to call for a *fresh scuttle of coals*: our coachmen (by the way, they must give up *white hats*) will flourish huge pokers instead of long whips; a very steep hill, which would now require an extra pair of nags, will then be met with the assistance of an extra pair of bellows; and, as no *thief* would touch a steam coach for fear of burning his fingers, the guard, to prevent accidents, will carry a wet mop rather than a pistol. There would be some difficulties, no doubt, in the infancy of these arrangements. The turnpike acts, for instance, would in most cases be eluded; and the post-horse duty would be likely to become unproductive. Impositions, however, as well as improvements, would take place as the system advanced. Any smoke

about to be started), in a few hours scatter themselves over the fertile and picturesque country of the United Kingdom. A celebrated writer says, that the happiest week of his life was passed in *travelling on foot in Switzerland*. In after-life, whenever he travelled he was so much occupied in taking care of his luggage, and looking forward to his destination, that the journey itself afforded him no pleasure.—Who has not experienced the same feeling? A few days in the country are delightful to every one, and a *tour* is the means of perpetuating the pleasure.—Not to mention the movement, with its novelty, its air, and its exercise, every village at which we halt is a source of interest; there is its geography to explore, the aspect of its cottages and villas, its groups of sun-burnt happy faces; and, above all, there is its *churchyard*, with its quiet graves, and its epitaphs, which have not a depressing but a tranquillizing influence on the imagination and the heart:—presenting a scene like that described by the poet, over which there breathes a spirit of deep, solemn, and mournful repose.

A SUMMER-EVENING CHURCHYARD,

Lechlade, Gloucestershire.

The wind has swept from the wide atmosphere
 Each vapour that obscured the sunset's ray;
 And pallid evening twines its beaming hair
 In duskier braids around the languid eyes of day:
 Silence and twilight, unbeloved of men,
 Creep hand in hand from yon obscurest glen.

which proceeded from the furnace of the vehicle would, converted into gas light, serve in time to direct its progress. The heat of the fire might, perhaps, be a little inconvenient in summer; but (to outside travellers especially) in winter it would be an advantage. And, with respect to the possibility of an occasional *blow up*, there can be no doubt, that, as soon as the scheme gets into practice, any one of the assurance companies, for a reasonable premium, will guarantee, at per mile, the lives of steam passengers; and such insurance might either be made matter of separate contract by the individual, or it might be done generally by the coach proprietor, and included in the fare.

They breathe their spells towards departing day,
 Encompassing the earth, air, stars, and sea ;
 Light, sound, and motion own the potent sway,
 Responding to the charm with its own mystery.

The winds are still, or the dry church-tower grass
 Knows not their gentle motions as they pass.

Thou too, ærial Pile ! whose pinnacles

Point from one shrine like pyramids of fire,
 Obeyest in silence their sweet solemn spells,
 Clothing in hues of heaven thy dim and distant spire,
 Around whose lessening and invisible height
 Gather among the stars the clouds of night.

The dead are sleeping in their sepulchres ;

And, mouldering as they sleep, a thrilling sound
 Half sense, half thought, among the darkness stirs,
 Breathed from their wormy beds all living things around,
 And, mingling with the still night and mute sky,
 Its awful hush is felt inaudibly.

Thus solemnized and softened, death is mild

And terrorless as this serenest night :

Here could I hope, like some inquiring child

Sporting on graves, that death did hide from human sight
 Sweet secrets, or beside its breathless sleep
 That loveliest dreams perpetual watch did keep.

PERCY BYSSHE SHELLEY.

SEPTEMBER.

SEPTEMBER is composed of *septem*, seven, and the termination *ber*, like *lis* in *Aprilis*, *Quintilis*, *Sex-tilis*. This rule will also apply to the three following months, Octo-ber, Novem-ber, Decem-ber.

Remarkable Days

IN SEPTEMBER 1823.

1.—SAINT GILES.

GILES, or Ægidius, was born at Athens, but, after he had disposed of his patrimony in charitable uses, came to France in the year 715. He lived two years

with Cæsarius, Bishop of Arles, and afterwards retired into solitude.

2.—LONDON BURNT.

The fire of London broke out on Sunday morning, September 2d, 1666, O.S.; and being impelled by strong winds, raged with irresistible fury nearly four days and nights; nor was it entirely mastered till the fifth morning after it began.—See an interesting narrative of the fire of London, by an eye-witness, in T.T. for 1820, pp. 213-219.

*2. 1822.—PRESTON GUILD CELEBRATED.

This Guild is one of the most splendid provincial festivals in England, and is held once in twenty years. It was commemorated *three* times during his late Majesty's reign—an event that never occurred in the reign of any previous King of England. The institution of this festival is five centuries old. It was confirmed by charters granted by Edward III, Richard II, and Charles II, whereby the burgesses were antiently enabled to hold certain pleas of land, &c., within their own precincts, and are now required to renew their claims to the rights, privileges, and freedom, which belong to them in virtue of their charter; which franchises devolve every twenty years into the hands of the mayor and corporation, and become extinct if not renewed at these periods. It appears from the record of the borough, that there have been twenty Guilds in five hundred years; that in the two first centuries they were held at irregular periods, but that since that time, beginning with the reign of Henry VIII, they have been celebrated regularly, without intermission, every twenty years. In the times when guilds were instituted, it was the practice to commit all great affairs, spiritual and secular, to the guardianship of some particular saint; in conformity with this superstition, Preston Guild was placed under the patronage of St. John the Baptist, and this king of feasts always begins the Monday next after the decollation of the Baptist.

The *procession* consisted chiefly of a picturesque display of the emblems of the different trades, deputations from which walked in the following order:— 1. Tanners', Skinners', Curriers', and Glovers' Company; 2. Spinners, Weavers, and Woolcombers; 3. Shoemakers; 4. Carpenters; 5. Butchers; 6. Vintners; 7. Tailors; 8. Smiths; 9. Odd Fellows' Society; 10. Bricklayers; 11. Plasterers; 12. Gardeners; 13. Printers and Bookbinders; 14. Freemasons. The Mayor and Corporation closed the procession. The whole of the persons composing this pageant were dressed in new apparel, with sashes and rosettes. The banners were of the most splendid description. Before the Spinners and others engaged in the cotton trade, cotton trees were carried, and carriages, drawn by horses, contained the steam-engines and different machinery employed in that business, all at full work, and superintended by able workmen, who were chiefly dressed in white clothing. This exhibition had a most pleasing and novel effect. Between each carriage walked forty men with white sashes, and, on a rose-coloured ground, was the inscription 'Success to the Spindle,' 'Prosperity to the Warpers,' &c. &c. The procession of the Master Tailors claimed particular notice, and excited much laughter from its singularity. The Smiths were preceded by two stout men in antique dresses, carrying axes, followed by two others, one in mail and the other in brass armour. The Carpenters and Joiners' Company made a splendid show; each man carried a wand, surmounted with a gilt square and compass. The 'Paradise Lodge of Gardeners' was greatly admired: a large crown of flowers preceded the individuals composing the lodge, together with poles bearing specimens of the choicest fruits. Two children raised in a car of flowers, surmounted with trees, personified Adam and Eve, the serpent being placed between them, with a large apple in its mouth. The Printers and Bookbinders came in deservedly

for a great share of public attention. In a large vehicle, a printing press was seen at full work, striking off various mottos, which were eagerly purchased. On the side of the carriage appeared the words—‘Printing invented 1440,’—and, on the flags, —‘*Libertas non licentia*,’ and ‘*Sit lux, et lux fuit*.’ Next came the *Odd Fellows*, attired in the eccentric dress of their order. The Freemasons, decorated with their several orders, closed the procession, and lined the way from the town-hall to the church, for the Mayor, Recorder, and Members of the Corporation, who proceeded on foot, together with the officers of the city, bearing the mace, &c. The sermon was preached by the Vicar, from the 4th verse of the 122d Psalm; and, at the conclusion of Divine Service, the procession, in the order already mentioned, paraded all the principal streets of the town back to the town-hall, where the bands played ‘*God save the King*,’ and ‘*See, the Conquering Hero comes*.’ The Mayor and Corporation walked the whole of the distance, though the rain poured very fast. The whole line of procession was thronged with spectators, together with the tops of houses and churches. The windows presented a brilliant assemblage of beauty and fashion. In the evening the opening Guild Ball was numerously attended, and displayed a scene of beauty, elegance, and fashion, unrivalled in that town, and, perhaps, in the county. The dresses of the ladies were particularly splendid, uniting the very height of fashion with classical chasteness. Silver lama over white muslin, with a profusion of pearl ornaments, in a variety of devices of loops, broaches, tiaras, necklaces, &c., formed the prevailing costume. The simplicity and elegance of the general appearance were uncommonly attractive and beautiful.

Various other processions, horse-races, balls, and endless *carnivalia*, followed, continuing for several days.

7.—SAINT EUNERCHUS.

Eunerchus, or Evortius, was Bishop of Orleans, and present at the council of Valentia, A.D. 375. The circumstances of his election to this see were considered as miraculous, and principally ascribed to a dove, which alighted upon his head in consequence of the prayers of the electors.

8.—NATIVITY OF THE VIRGIN MARY.

A concert of angels having been heard in the air to solemnize this important event, the festival was appointed by Pope Servius about the year 695. Innocent IV honoured this feast with an octave in 1244, and Gregory XI, about the year 1370, with a vigil.

*13. 1819.—WILLIAM SMITH DIED, ÆT. 89.

He was, for more than thirty-five years, a player on the London stage, having made his first appearance at Covent Garden Theatre, January 1, 1753, in the character of Theodosius;—he retired from Drury Lane at the end of the season in 1788. Dr. Johnson, in his *Life of Savage*, speaking of Mr. Wilks the player, says, he was ‘a man, who, whatever were his abilities as an actor, deserves at least to be remembered for his virtues, which are not often to be found in the world; and, perhaps, less often in his profession than in others. To be humane, generous, and candid, is a very high degree of merit in any case; but those qualifications deserve still greater praise when they are found in that condition which makes almost every other man, for whatever reason, contemptuous, insolent, petulant, selfish, and brutal.’ (*Works, by Murphy*, vol. x, p. 294). We conceive these sentiments not to be candid or just, and they were probably written by Johnson in a fit of spleen and envy against his more fortunate brother adventurer Garrick; for Johnson, notwithstanding his great abilities and great virtues, was, perhaps, more obnoxious to these reproachful epithets than Gar-

rick, or most others of the superior players; and, indeed, Dr. Johnson himself, when Mrs. Siddons visited him in 1783, as we are told by Boswell, 'having expatiated, with his usual force and eloquence, on Mr. Garrick's extraordinary eminence as an actor, he concluded with this compliment to his social talents, "And, after all, Madam, I thought him less to be envied on the stage than at the head of a table."'—(Vol. iv, p. 258.) Mr. Smith was educated at Eton School, and St. John's College, Cambridge. His taking to the stage was occasioned by some youthful irregularities, but he maintained, throughout his theatrical career, the name of *gentleman Smith*. His first wife was a sister of the Earl of Sandwich, who was First Lord of the Admiralty; she lived but a short time, and he married again. On Mr. Smith's retiring from the stage, he went to live at Bury St. Edmund's, where he was universally respected, and his company courted. His manners were those of the polished gentleman: though educated in a certain school of acting, and living to a great age, Mr. S. was no bigot to his own times and manners, but he went up to London, at different periods, to witness the so much vaunted powers of Betty and of Kean, and pronounced the latter superior to all former professors of the art. Mr. S. never published or brought out any piece, but he had altered the *Two Noble Kinsmen* of Beaumont and Fletcher, and had begun an alteration of Shakspeare's Plays, omitting the exceptionable passages.

14.—HOLY CROSS.

This festival was first observed in the year 615, on the following occasion: Cosroes, King of Persia, having plundered Jerusalem, carried away large pieces of the cross which had been left there by the Empress Helena. Heraclius, the emperor, soon afterwards engaged and defeated him, and recovered the cross; but, bringing it back in triumph to Jeru-

saalem, he found the gates shut against him, and heard a voice from heaven saying, that the *King of Kings* did not enter into that city in so stately a manner, but *meek and lowly, and riding upon an ass*. The emperor then immediately dismounted from his horse, and walked through the city barefooted, carrying the cross himself. The ceremony of *kissing the cross* is performed in the Greek church on this day. See our last volume, p. 245.

We cannot better illustrate this notice of *Holy Cross Day* than by giving Professor Humboldt's interesting description of the *Cross of the South*, as lately seen by this celebrated traveller. 'The lower regions of the air (he observes) were loaded with vapours for some days. We saw distinctly, for the first time, the Cross of the South, only in the night of the 4th and 5th of July, in the sixteenth degree of latitude: it was strongly inclined, and appeared, from time to time, between the clouds; the centre of which, furrowed by uncondensed lightnings, reflected a silver light. The pleasure felt on discovering the Southern Cross was warmly shared by such of the crew as had lived in the colonies. In the solitude of the seas, we hail a star as a friend, from whom we have been long separated. Among the Portuguese and the Spaniards, peculiar motives seem to increase this feeling; a religious sentiment attaches them to a constellation, the form of which recalls the sign of the faith planted by their ancestors in the deserts of the New World. The two great stars which mark the summit and the foot of the cross, having nearly the same right ascension, it follows that the constellation is almost vertical at the moment when it passes the meridian. This circumstance is known to every nation that lives beyond the tropics, or in the southern hemisphere. It is known at what hour of the night, in different seasons, the Southern Cross is erect, or inclined. It is a *time-piece*, that advances very re-

lers:—See Mrs. C. Stothard's interesting 'Tour in Normandy;' Mr. Dibdin's elegant 'Bibliographical Tour;' Mr. Dawson Turner's valuable 'Tour in Normandy;' and particularly the description by this latter gentleman, accompanying *Mr. Cotman's* two very splendid etchings of the cathedral, in his 'Architectural Antiquities of Normandy.'

It is a source of great pleasure to the writer that he visited this Cathedral, for the *second* time, but a few days before the work of destruction took place; and during the very agreeable time that he passed in the fine 'auntient city' of Rouen, and its picturesque environs, he did not fail to perform his early matins in this magnificent structure; and while he paced its 'long-drawn aisles,' contemplated its 'fretted vaults,' 'its richly-storied windows,' and enjoyed the awe-inspiring 'dim, religious, light' of the place, he chaunted forth the following exquisite sonnet of Mr. WORDSWORTH, in which he trusts all his readers will devoutly join, and accord their fervent AMEN:—

Open your Gates, ye everlasting Piles!
Types of the spiritual Church which God hath reared;
Not loth we quit the newly-hallowed sward
And humble altar, mid your sumptuous aisles
To kneel—or thrird your intricate defiles—
Or down the nave to pace in motion slow,
Watching, with upward eyes, the tall tower grow,
And mount, at every step, with living wiles
Instinct—to rouse the heart and lead the will
By a bright ladder to the world above.
Open your gates, ye Monuments of love
Divine! thou *Lincoln*, on thy sovereign hill!
Thou stately *York*! and ye, whose splendours cheer
Isis and *Cam*, to patient Science dear!

17.—SAINT LAMBERT,

Lambert was Bishop of Utrecht, in the time of King Pepin I; but, reproving the king's grandson for his irregularities, he was cruelly murdered at the instigation of an abandoned woman. Being canonized, he obtained, at first, only a simple commemo-

ration in the calendar; but Robert Bishop of Leeds, in a general chapter of the Cistercian order, procured a solemn feast to his honour in the church in 1240.

17, 19, 20.—EMBER DAYS.—See p. 43.

*18. 1822.—STIRBICH FAIR PROCLAIMED.

This was formerly, before our roads were so good, and the communication with London so ready, the great emporium for the housekeepers and dealers in that part of the kingdom laying in their stores for the year; but, like all other fairs, it has dwindled, and is now kept up, probably, only by its being the season when the Norwich company of comedians come to Cambridge and perform for three weeks.

21.—SAINT MATTHEW.

In the year 64 or 65, Matthew wrote his Gospel in Hebrew, which was afterwards translated into Greek. After many labours and miracles, he closed his life at Nadabar, in Ethiopia, probably by martyrdom.—For an account of some civic ceremonies in London on this day, see our last volume, p. 245.

26.—OLD HOLY ROOD. See HOLY CROSS, p. 256.

26.—SAINT CYPRIAN.

He was an African by birth, of a good family, and well educated. He behaved with great courage and resolution in the Decian persecution, and openly invited the people to constancy and perseverance: this conduct so enraged the pagans, that he soon fell a victim to their fury, and suffered martyrdom under Valerianus and Gallienus, in 258.

29.—SAINT MICHAEL.

Saint Michael was an archangel who presided over the Jewish nation, and had an army of angels under his command and conduct; he fought also with the Dragon or Satan, and his angels; and, contending with the Devil, he disputed about the body of Moses. See Rev. xii, 7; Jude 9.

This was formerly a season of great celebrity: at present, all that we do in honour of it is to *eat a goose*. The origin of this custom is referred to Queen

Elizabeth, who was eating goose on Michaelmas Day, when the news came to her of the destruction of the Spanish Armada. For our part, whatever may be the origin of eating goose on this day, we should be sorry to be without so excellent a dish at any time when it is in season, but more especially on the feast of St. Michael; for we are entirely of *Garrick's* opinion in this matter, and we say with that great actor, '*He that has no taste for a Christmas-carol nor a MICHAELMAS GOOSE, is not a man to our taste.*'

Geese are not, in general, of such famous repute in *France*, as they are here, and seldom make their appearance upon the tables of the Parisian epicures. The flesh they condemn as coarse and unwholesome; and the apple-sauce, when mentioned, never fails to elicit flashes of astonishment, subsiding into peals of laughter. But the livers and thighs of geese, learnedly made into pies, and properly truffled, '*patés de foies gras*,' are reckoned a most delicate article; yet they have killed nearly as many gastronomers as the small-pox and scarlet fever have destroyed children. The department of Perigord, with Toulouse and Bayonne, used, notwithstanding, to cook annually, for the rest of the world, about 120,000 of these *lethiferous* pies. Large droves of geese were antiently led from Picardy to Italy, waddling over the Alps, and constantly stooping, according to their prudent custom, under the lofty triumphal arches which they happen to pass in their way. Yet geese are not so stupid as they are generally supposed to be. The famous chemist, Lemery, saw a goose turning the spit on which a turkey was roasting; unconscious, we hope, that some friend would soon accept the office for her. '*Alas! we are all turnspits in this world*,' adds the gastrographer who relates the fact; '*and, when we roast a friend, let us be aware that many stand ready to return the compliment.*'—(See p. 39 of the very amus-

ing *Notes to Tabella Cibaria*, an ingenious Latin poem on the well-known French *Carte*, or Bill of Fare, which offers so many attractions to the *gourmand* as well as the *gourmet*.)

30.—SAINT JEROME.

Jerome was born in a town called Stridon, on the confines of Pannonia and Dalmatia. He translated the Old Testament into Latin; and died in the eighth year of his age, A.D. 422.

Astronomical Occurrences

In SEPTEMBER 1823.

SOLAR PHENOMENA.

THE Sun enters *Libra* at 6 m. after 9 in the evening of the 23d of this month, and rises and sets at the following times. Proportion will give the intermediate epochs very nearly.

TABLE

Of the Sun's Rising and Setting for every fifth Day.

September 1st, Sun rises	14 m. after 5.	Sets	46 m. past 6
6th,	24	5	36
11th,	34	5	26
16th,	43	5	17
21st,	52	5	18
26th,	2	6	58

Equation of Time.

When the following numbers are applied as directed to apparent time, they will give the hour which should, at the same instant, be indicated by a well regulated clock. The intermediate corrections must be found by proportion.

TABLE

Of the Equation of Time for every fifth Day.

Monday.....	1st, to the time by the dial	add.....	m. 0	s. 2
Saturday...	6th, from the time by the dial	subtract	1	34
Thursday	11th,		3	15
Tuesday...	16th,		5	0
Sunday...	21st,		6	45
Friday...	26th,		8	29

LUNAR PHENOMENA.

Phases of the Moon.

New Moon	4th day, at 19 m. past 10 at night
First Quarter, 12th	45 6 in the morning
Full Moon	20th 1 7
Last Quarter	27th 56 noon.

Moon's Passage over the Meridian.

The following have been selected from the Moon's passages this month, as affording the best opportunities for observation, should the atmosphere prove clear in that direction, viz.

September 11th, at 23 m. after	5 in the evening
12th, ... 15	6
13th, ... 6	7
14th, ... 54	7
15th, ... 41	8
16th, ... 27	9 at night
17th, ... 10	10
18th, ... 53	10
19th, ... 37	11
27th, ... 45	5 in the morning
28th, ... 45	6
29th, ... 44	7
30th, ... 39	8

PHENOMENA PLANETARUM.

Phases of Venus.

Venus attains her greatest brilliancy in the early part of this month, and now exhibits a celestial object of great beauty. By referring to page 51 of our volume for 1819, it will be seen, that, on account of the great variation in the distance of this planet from the earth, her *maximum* brightness takes place when 3.1908 digits of her diameter is illuminated. The difference in her appearance will not, however, be very great for a few days, and therefore, if the atmosphere be serene and clear, she will be uncommonly brilliant all the first half of this month.

Sept. 1st, {	Illuminated part = 3.43776 digits
	Dark part..... = 8.56224

Now are the beautiful lines of Mrs. *Barbauld* peculiarly applicable to this planet; and we think our readers will scarcely fail to perceive something like the soft brilliancy of her light in the touching sweetness of the poetry.

Fair VENUS shines,
Even in the eye of day; with sweetest beam
Propitious shines, and shakes a trembling flood
Of softened radiance from her dewy locks.

Eclipses of Jupiter's Satellites.

The following are the visible eclipses of the first two of these small bodies this month, viz.

Immersions.

First Satellite, 3d day, at 26 m. 17 s. after 3 in the morning

19th 41 . . 45 1

26th 35 . . 10 3

Second Satellite, 8th 5 . . 6 3

TABLE *Of the Transits and Meridional Altitudes of the Planets.*

	1st	7th	13th	19th	25th
TRANSITS.					
	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
Mercury	1 5 <i>aft.</i>	1 16	1 24	1 30	1 30
Venus	2 23 <i>aft.</i>	2 11	1 56	1 36	1 11
Mars	9 18 <i>mor.</i>	9 12	9 6	9 0	8 53
Jupiter	7 47 <i>mor.</i>	7 30	7 12	6 53	6 35
Saturn	4 48 <i>mor.</i>	4 29	4 7	3 45	3 23
G. Sidus	7 53 <i>aft.</i>	7 31	7 10	6 48	6 27
ALTITUDES.					
Mercury	40°30'	36° 8'	32° 4'	28°24'	25°18'
Venus	26 46	24 48	23 14	22 13	21 52
Mars	60 10	59 27	58 39	57 46	56 50
Jupiter	63 33	63 30	63 28	63 25	63 23
Saturn	54 59	54 58	54 56	54 54	54 50
G. Sidus	14 53	14 53	14 53	14 53	14 53

Other Phenomena.

The Moon will be in conjunction with Mars at 57 m. past 9 in the evening of the 1st of this month. Saturn will be stationary on the 7th; and the Moon will be in conjunction with Venus at 18 m. after 7 in the evening of the same day. She will also be in conjunction with α in Scorpio at 12 m. past 8 in the

Z

morning of the 11th. *Georgium Sidus* will be stationary on the 16th, and *Venus* on the 20th. *Mercury* will be in conjunction with α in *Virgo* at 40 m. after 8 in the evening of the 19th, when the star and planet will be so nearly in a line with each other as only to be separated by an apparent angle of $3\frac{1}{4}'$, which *Mercury* will be south of the star. This planet will also attain his greatest elongation on the 25th, and the *Moon* will be in conjunction with *Jupiter* at 56 m. past 10 at night on the 27th.

REFLECTIONS ON THE STARRY HEAVENS.

[Continued from page 261.]

To ascertain the places of the stars, and point them out in the heavens, astronomers generally make use of two quantities, which they call *Declination* and *Right Ascension*. A great circle is supposed to pass through the two poles and the centre of each star, cutting the equator at right angles. This is called the circle of declination; and the arc of it, included between the equator and the star, is that which measures its declination. This declination is therefore of two kinds, north and south, as the star is situated on the north or south side of the equinoctial line. Those stars that are at the same distance from the equator have, consequently, equal declinations. From knowing the declination of any star, and the latitude of the place, or, which answers the same purpose, the altitude of the equator (which is equal to the co-latitude), the meridional altitude of the star may be easily found. To find the real place of a star, however, another circle is requisite, on which its distance east or west is measured from some fixed point. The circle of declination passing through the point of the equator where it is intersected by the ecliptic, called the *vernal equinoctial point*, is that fixed upon by astronomers for the commence-

ment of this measure. The arc of the equator included between the vernal equinox and the circle of declination that passes through the star, is called its *Right Ascension*. This is reckoned from the point of its commencement *eastward* quite round the heavens; and is either expressed in degrees and minutes, or time, but frequently the latter: these, however, are readily converted into each other. When both the right ascension and declination are known, the place of the star is determined, and it may consequently be pointed out in the heavens. When latitude and longitude are used, they are referred to the equinoctial point and the ecliptic, in the same way as to that point and the equator for right ascension and declination. If a star have the same right ascension as the Sun has, they will come to the meridian at the same time; but from the earth's annual motion in its orbit, the Sun appears to advance eastward among the stars at the rate of nearly a degree a day, which is equal to four minutes of time; so that this causes the stars to pass the meridian each day four minutes sooner than on the preceding day. Those stars, for instance, that are on the meridian at midnight, will, the next night, arrive at the same point four minutes before twelve the following night, eight minutes, &c. If, therefore, the heavens be viewed at the same hour of any two nights, six months distant from each other, they will present opposite hemispheres, and, consequently, a completely different assemblage of stars, with the exception of such as never set, in the latitude of observation.

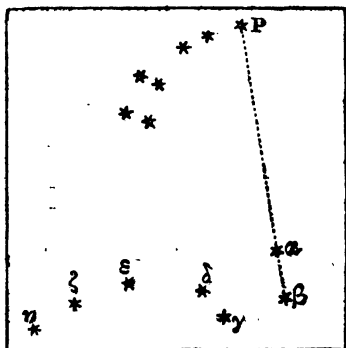
Astronomers have divided the starry firmament into sections similar to countries on the surface of the earth: these divisions they denominate *constellations*, each of them including a number of stars that lie contiguous to each other; so that, by a knowledge of these, the particular parts of the starry heavens are readily referred to on celestial maps, in the same manner as countries are pointed out on

maps of the terrestrial globe. For a list of the constellations we must refer to the INTRODUCTION of our volume for 1815. The stars in each constellation are also distinguished by the letters of the Greek alphabet, α being annexed to the largest, β to the next in size, γ to the third, and so on for the others. New stars are also referred to by means of the letters in the Roman alphabet. In briefly describing a few of these constellations, we shall avail ourselves of the valuable information presented in an excellent *Celestial Atlas*, recently published by *Alexander Jamieson*, A. M., to which we also refer our readers for a more copious account of the starry assemblages; assuring such of them as feel an interest in the subject, that they will by no means lose their labour in its perusal.

URSA MAJOR.

Ursa Major, or the *Great Bear*, is one of those constellations that never set in these latitudes. It constantly revolves about the north pole, taking all possible positions in each diurnal revolution, and presenting one of the finest objects in the northern part of the heavens. By some this constellation is thought to be Calisto, an attendant upon Diana, the goddess of hunting; others suppose it to represent Arcas, the son of Jupiter and Calisto. The antients are said to have represented each of the constellations of the bears under the form of a waggon drawn by a team of horses; and the Great Bear is still best known in many parts of this country as *Charles's Wain*. In some places it is also called the plough, to which a strong resemblance may certainly be traced. It appears to have been of Egyptian origin, and various conjectures have been formed in reference to the reasons for introducing this animal into the heavens; the most plausible seems to be, that the northern regions of the earth being the noted haunts of the bear, it might be thought the fittest

symbol for containing the pole of the world, as well as for that constellation which should serve as an index to point out that pole. It is easily distinguished by seven bright stars, four of which, α , β , γ , δ , form the angles of a quadrilateral figure; the others, ϵ , ζ , η , form a curve line nearly in the direction of one of the diagonals of the quadrilateral. This last is situated in the upper and hinder part of the body of the Bear, while the curve forms the tail. *Alpha* and *beta*, which constitute the side of the quadrilateral opposite the tail, are called the *pointers*, because they direct the eye to a bright star P in the tail of the *Little Bear*, which is situated near the north pole. This will readily be perceived by an inspection of the lower figure in the subjoined diagram, which represents *Ursa Major* when immediately below the pole. The seven stars in the upper figure in the diagram also represent *Ursa Minor*, which are obviously placed under a similar figure to those of *Ursa Major*, but at only about half the dimensions of the latter sign.



This constellation contains eighty-seven stars, one of which is of the 1st magnitude, four of the 2d, three of the 3d, and ten of the 4th; all the others

Z 2

belong to the inferior classes. When the constellation is considered under the idea of *Charles's Wain*, the four bright stars, α , β , γ , and δ , are the wheels, and the other three represent the shafts and horses; but, as the Great Bear, its tail is marked out by these three, the back and body by the other four: there are also others of the 3d and 4th magnitude that mark the outlines of the figure with much precision. The upper pointer is of the 2d magnitude, and, like those in the tail, has its particular name; it is called *Dubhe*. The middle one in the tail is *Mizar*, and appears double. As the southern extremity of this sign approaches within 32° of the equator, and the northern to 72° of north declination, it therefore becomes vertical to Europe, most of Asia, and North America, during each diurnal revolution of the earth, and no part of the animal sinks below the horizon except his right hind leg.

In 1820, *Dubhe* (α) had $62^\circ 43' 17''$ of north declination, and $163^\circ 7' 6''$ of right ascension. It culminated, or came to the meridian above the pole, at London, for the first day of each month in that year, as in the following table, with a meridian altitude of $78^\circ 47' 43''$:—

	<i>h.</i>	<i>m.</i>			<i>h.</i>	<i>m.</i>
January - -	4	0	morning	}	July - - -	4 15
February -	1	45	- - -	}	August - - -	2 15
March - - -	0	2	- - -	}	September -	0 10
April - - -	10	10	night	}	October - -	10 20
May - - - -	8	25	- -	}	November -	8 20
June - - - -	6	17	evening	}	December -	6 51

By adding 12 hours to the times given in the preceding list, we shall have the moments when the same star was on the meridian below the pole.

URSA MINOR.

Ursa Minor, or *Cynosura*, the *Little Bear*, according to the antient fable, represents Arcas, the

son of Calisto, whom Jupiter placed in the heavens under the figure of a Bear. It embraces the pole of the world, and is easily distinguished by seven stars disposed like those of the Great Bear, but in a contrary position. This constellation borders upon Draco on west and north, upon Camelopardalis on the east, and upon Cassiopeia and Perseus on the south. It stretches from the pole to the arctic circle, and contains twenty-four stars; among which are, one of the 2d magnitude, two of the 3d, and four of the 4th. The first of these, marked α , and denominated the pole star, is near the extremity of the tail. This is that which is marked p (indicating a pole) in the preceding figure, at the upper termination of the dotted line. The two stars, β and γ , which are in the breast of the Little Bear, and which form the side of the quadrilateral opposite the tail, are called the *Guards* or *Wardens* of the pole.

This is one of the most antient of the constellations, and has been well known to mariners from the earliest ages of navigation and commerce, as affording an easy method of determining a ship's course, and the latitude of a place in the northern hemisphere. This star, however, is not exactly in the pole, for its declination is, at present (1823), about $88^{\circ} 21' 47'' \cdot 5$; and, consequently, the complement of this, or its polar distance, is $1^{\circ} 38' 12'' \cdot 5$. Hence, if the altitude of this star be found when it is on the meridian above the pole, and this polar distance be subtracted from it, the remainder will be the *latitude* of the place of observation; or, if the polar distance be added to the altitude of the star when on the meridian below the pole, the result will be the same.

The Naturalist's Diary

For SEPTEMBER 1822.

It yet is not full five;
 The morning bath not lost her virgin blush,
 Nor step, but mine, soiled the earth's tinsel robe.
 — How full of heaven this solitude appears,
 This healthful comfort of the happy swain;
 Who, from his hard but peaceful bed roused up,
 In's morning exercise saluted is
 By a full quire of feathered choristers,
 Wedding their notes to the enamoured air.
 Here Nature, in her unaffected dresse,
 Plaited with vallies, and imboast with hills,
 Enchast with silver streams, and fringed with woods,
 Sits lovely in her native russet.

Chamberlayne.

MILD and pleasant weather is generally experienced in September; often, indeed, this is the finest month in the whole year, unless the summer have been hot and dry, when rain may be expected both in this and the succeeding month. A morning's walk at this season is replete with gratification to the admirer of Nature's beauties—such as they are pourtrayed in the charming *cabinet picture* which forms the introduction to our Diary¹.

But the *close* air of the metropolis, with its exoitements, is considered, by an eminent physician lately deceased, more beneficial to the melancholy man and the hypochondriac than the *pure* air of the country with its dulness. 'The lamp of life (he observes) 'burns to waste in the sepulchre of solitude. Misery ought, in a more especial manner, to shun that seclusion which it is too apt to seek. It is necessary to a pure relish for rural retirement, that a man should carry into it a mind unincumbered with painful remembrances, and unwounded by the infliction of any

¹ See T.T. 1822, p. 251, for an exquisite description of a *sun-rise from the sea*, at Southampton, by the poet GRAY.

great calamity. How can he be expected to enjoy the vernal freshness of the fields, and the blue transparency of the sky, whose hopes have been prematurely withered, and whose moral prospects terminate in a clouded horizon? One reason, more important than his defect of sight, why the eloquent author of *Rasselas* felt so decided a distaste for country scenes, was perhaps the morbid melancholy, the radical wretchedness of his constitution. A wretchedness which originates in remorse tends still more completely to paralyze the sensibility to all the fascinations of external and inanimate nature. This may be considered as one of the punishments which, in the present world, is inflicted upon moral transgression. Had our first parents been allowed, after the fall, to continue in the garden of Eden, the loss of their innocence would have robbed it of all its charms.'

The country is a different place to one who has been brought up in cities, and to another who has been brought up in the country. The former finds, after a few days spent in exploring the neighbourhood and admiring the landscapes, that he has come to the end of his amusements. He has no new rides to take; the working people seem to sleep over their work, and the educated classes to be fifty years behind in knowledge. He gets tired of the spot, and longs for the metropolis, with its glittering shops, its crowded streets, its various physiognomies, its stimulating society, its ready access to knowledge, its 'full tide of human existence.' On the contrary, to him who has been brought up in the country, it supplies not only pure air and a week's amusement, but a constant succession of tranquil, unwearying occupations. He can angle, shoot, hunt, botanize, and converse with the neighbouring farmers on scientific agriculture. To him the various physiognomies of the flowers are as exciting as the various physiognomies of men: an argument about drill and broad

cast is as interesting as one on the influence of paper currency; and a gallop after the fox not only circulates his blood, but amuses his mind as much as a walk through St. James's. To a man of sensibility, imagination, and rural pursuits, the country is any thing but dull. Goëthe represents his hero as recovering from a fit of melancholy in the country, and as being interested and elevated by the objects around him. 'I lie down in the tall grass near a falling brook, and close to the earth a thousand varieties of grasses become perceptible. When I listen to the hum of the little world between the stubble, and see the countless, indescribable forms of the worms and insects, I feel the presence of the Almighty who has created us, the breath of the All-benevolent who supports us in perpetual enjoyment.'

But there are *flowers* to be seen in *this month*; and what idler will omit the last opportunity of being presented to the gay and elegant *Flora*, in *her* tasteful drawing-room, in the splendid PALACE OF NATURE? Ye, who have the taste, may now amuse your vacant minutes with the examination of the flowers that still remain, before 'Winter shuts the scene.'—'Gather ye *flowers* while ye may, for time is yet a-going.'

There are in blow, in this month, heart's-ease in the garden (and always we hope in the house), nasturtia, china aster, marigolds, sweet peas, mignonette, golden rod, stocks, tangier pea, holly-hock, michaelmas daisy in fine weather quite clustered with bees; saffron (*crocus sativus*), and ivy (*hedera helix*). The following also may be added as flowering in September: the flowering rush (*britomus umbellatus*), smallage (*apium graveolens*), see our last volume, p. 252; and the great burnet saxifrage (*pimpinella magna*), which, as a cosmetic, is inferior to none, freckles being quickly removed by it. Those elegantly twining and ornamental plants the *convolvuli*, or bind-weeds, adorn almost every hedge with their

milk-white blossoms; which, contrasted with the shining scarlet berries of the *solanum dulcamara*, seen in profusion at the same time, give a pretty appearance to the hedges; while over the ground beneath are scattered the yellow flowers of the toad flax (*antirrhinum linaria*), with *scilla autumnalis*, and the interesting flowers of the *epilobium angustifolium*. The officinal marsh-mallow (*althæa officinalis*) is also in flower: it is sometimes found in marshes, but most commonly in the banks of ditches in marshy countries. Among the *maritime* plants may be named, the marsh glass-wort (*salicornia herbacea*), and the sea-stork's bill (*erodium maritimum*), on *sandy shores*.

Various of the feathered tribe now commence their autumnal music; among these, the *thrush*, the *black-bird*, and the *woodlark*, are conspicuous. Our old friend the *robin* also, to whom we have devoted some pages in our Diary for January, now delights us with his simple notes, reminding us of the approach of winter, and of his intended daily visits to our parlour window. 'As oft as I hear the *Robin Redbreast* (it is beautifully observed by a pithy old writer) chaunt it as cheerfully in September, the beginning of Winter, as in March, the approach of Summer, why should not wee (think I) give as cheerful entertainment to the hoary-frosty hayres of our age's winter, as to the primroses of our youth's spring? Why not to the declining sunne in adversity, as (like Persians) to the rising sunne of prosperity? I am sent to the ant to learne industry, to the dove to learne innocency, to the serpent to learne wisdom; and why not to this bird to learne equanimity and patience, and to keepe the same tenour of my minde's quietnesse, as well at the approach of calamitie's winter as of the spring of happinesse? And, since the Roman's constancy is so commended, who changed not his countenance with his changed fortunes, why should not I, with a Christian resolution, hold a steady course in all weathers; and, though I bee

forced with crosse-windes to shift my sailes, and catch at side-windes, yet skilfully to steere, and keepe on my course, by the *Cape of Good Hope*, till I arrive at the haven of eternall happinesse?— (*Warwick's Spare Minutes.*)

The *phalæna russula* and the saffron butterfly, (*papilio hyale*) appear in this month.

Stoats and *weasels* are now very active in the poultry yards. Sometimes they are useful auxiliaries in destroying rats; but unfortunately they frequently attack the poultry. The *weasel* is much smaller than the *stoat*, and may be known by a distinct black spot on each side of the mouth. The colour of both is a light brown, but, in severe winters, the *stoat* is often found nearly white.

The destruction of the *partridge*, which forms so great a delicacy at our table, commences with this month. Of the attachment of this bird to its young we have before spoken (T.T. 1814, p. 245); we have now to record a pleasing instance of affection in an attempt to protect its eggs, which occurred in June 1822, at Pilton Court Farm, near Gloucester. The labourers, in replacing a quantity of hay that had, through some carelessness, fallen from a waggon on which it had been put for the purpose of removal, discovered a fine hen partridge sitting on thirteen eggs. It is remarkable that the scythe and rake had each passed over her in regular process but a short time previously, but neither were sufficient to terrify her from the discharge of her parental duty; and even when the heavy fall of hay encompassed her in apparent ruin, she evidently had not made the least effort to escape the threatening danger, but rather appeared willing to sacrifice her life in the preservation of her nest.

The autumnal equinox happens on the 22d of September, and, at this time, the days and nights are equal all over the earth. About this period, heavy storms of wind and rain are experienced, as well as at the vernal equinox.

*To the WINDS.**By Bernard Barton.*

Ye viewless minstrels of the sky!
 I marvel not in times gone by
 That ye were deified:
 For, even in this later day,
 To me oft' has your pow'r, or play,
 Unearthly thoughts supplied.

Awful your pow'r! when by your might
 You heave the wild waves, crested white,
 Like mountains in your wrath;
 Ploughing between them valleys deep,
 Which, to the seaman roused from sleep,
 Yawn like Death's op'ning path!

Graceful your play! when, round the bow'r
 Where Beauty culls Spring's loveliest flow'r,
 To wreath her dark locks there,
 Your gentlest whispers lightly breathe
 The leaves between, flit round that wreath,
 And stir her silken hair.

Still, thoughts like these are but of earth,
 And you can give far loftier birth:
 Ye come!—we know not whence!
 Ye go!—can mortals trace your flight?
 All imperceptible to sight,
 Though audible to sense.

The Sun,—his rise and set we know;
 The Sea,—we mark its ebb and flow;
 The Moon,—her wax and wane;
 The Stars,—man knows their courses well,
 The Comets' vagrant paths can tell;—
 But You his search disdain.

Ye restless, homeless, shapeless things!
 Who mock all our imaginings,
 Like spirits in a dream;
 What epithet can words supply
 Unto the bard who takes such high
 Unmanageable theme?

But one:—to me, when Fancy stirs
 My thoughts, ye seem HEAV'N'S MESSENGERS,
 Who leave no path untrod;
 And when, as now, at midnight's hour,
 I hear your voice in all its pow'r,—
 It seems the VOICE OF GOD.

A a

The common house-flies (notwithstanding the *Michaelmas notice to quit*, given in T. T. for 1821, p. 243) are numerous and troublesome, from their want of activity, as the weather decreases in warmth. A fly very much resembling this (*stomoxys calcitrans*) is also very troublesome to animals, both quadrupedal and bipedal.

The woolly excrescences now found on the dog-rose (*rosa canina*), sometimes called *spongia rosæ*, *bedegua*, or *bedeguar*, are formed by a small fly (*cynips rosæ*), which, piercing the tender bud with its sting, sheds a drop of liquid, together with its eggs.

Herrings (*clupea*) pay their annual visit to England in this month, and afford a rich harvest to the inhabitants of its eastern and western coasts. A few herrings are caught during the *summer* months in some parts of the Bristol Channel; and they are supposed, by the fishermen, to remain there the whole year: they are of very superior flavour to those usually caught in the autumn.—For an anecdote of his *present Majesty*, as connected with the *herring*, see our last tome, pp. 254, 255, *note*.

Abundance of *ripe fruit* now tempts the willing palate; but we should be careful to abstain from such as is immature or *decaying*, for both these are of dangerous use. The summer of 1822 has been particularly favourable to the ripening of all kinds of wall-fruit: the *fig* and the *grape*, likewise, have arrived at a perfection in the open air, this season, but rarely witnessed in England; and many a 'goodly cluster' of the latter has been proudly exhibited by the horticulturist: there has, indeed, been such an *abundance* of the grape, that this elegant ornament of the dessert will, probably, grace most of our tables during the *English Carnival*, from Christmas to Twelfth-day. But, if we regard *size* and *flavour* in this grateful fruit, we must look to more southern countries. They who have visited *France* (to say

nothing of Italy, Spain, and the Levant), will scarcely forget the exquisite taste and splendid appearance of the *Chasselas de Fontainebleau*, or the *Muscats* of *Avignon*; the former selling at Paris, in 1822, for fivepence a pound, and the latter (400 miles from the capital) at three halfpence a hatfull. The common grapes, such as men, women, and children, *usually eat* in France, and such as are not to be procured in *Angleterre*, were sold for four sous the pound in this year.

In the course of this month, *walnuts* are added to our social pleasures; for what is more interesting than the after-dinner '*Wine and Walnuts*' of a small, well-selected, friendly '*English party*'?—Will our readers hear some anecdotes of our favourite fruit? We think the *ladies*, who amuse themselves so prettily in preparing them *whole* for mastication, will not object. This excellent fruit, then, as we are told, originated in the sunny vales of Persia. Nuts were strewn antiently in all the avenues leading to the nuptial apartment; and the ceremony of strewing the nuts, *nuces spargere*, was the conclusion of the wedding-day. Nuts are very useful under different points of view; the threefold advantage which they possess, of giving light, warmth, and food, has been combined by Ovid in the following distich:—

*Nux vigilat, recreat, nutrit, prelo, igne, manique ;
Pressa, perusta, crepans, luce, calore, cibo.*

This poet, in his poem entitled *Nux*, has also taken notice of the various insults which the walnut-tree receives at the hands of travellers on the highway; and Boileau says, Ep. vi, speaking of the river '*Seine*':

*Tous ses bords sont couverts de saules non plantés,
Et de noyers souvent du passant insultés.*

² And here our readers, or rather the readers of that well-conducted miscellany '*the Literary Gazette*,' will, doubtless, be reminded of some most ingenious papers under this title: we trust that, when the series is completed, they will be published in a separate form. To such as have not seen them, we can only say, *Lege, et Perlege!*

A bas-relief, on the south-west side of the cathedral of Amiens, representing two figures, who seem busy about the contents of a sack or bag full of what may be taken for walnuts, attaches itself to the following anecdote, but appears of a date anterior to the sixteenth century.—This town was taken by surprise, when Ferdinand Tellès besieged it in 1597, owing to the stratagem of a few Spanish soldiers, who, disguised in a plain country-dress, drove, early in the morning, a cart loaded with sacks full of walnuts. The gates were unsuspectingly opened by the sentinels; two or three of the bags bursting, as if accidentally, the ground was strewed with the fruit. The guards fell to directly, picking and scrambling, whilst a body of troops, who were in ambush under the ramparts, rushed by impetuously, overcame the sentinels, and made themselves masters of the town. Henry IV, however, soon retook it from the Spaniards.

Having finished our 'wine and walnuts,' let us take a ramble by the *sea-side*, 'a pleasant thing' in the month of September; but let us not forget that 'on the shell-strewn borders of the ever-rolling ocean,' as well as in 'the daisied meadow'—we may equally discover evidences of a Deity, and objects of wonder and delight.

Of *submarine plants*, our coasts (particularly the western) furnish a great variety, many of which are very beautiful, and are particularly remarkable for the firmness of their texture, and the brilliancy of their colouring. One of the most remarkable is the *bloody sea dock*, which, when in a state of perfection, is of a rich blood colour; from which circumstance it probably derived its name. This plant is so very thin, and so strongly adhesive, that, if laid on paper, the sheet may be folded in almost any form, without occasioning either wrinkle or separation. The colour will retain its brilliancy for many years, and, when it has somewhat faded, it becomes variegated with red and yellow, bearing some re-

semblance to a striped tulip. Of this genus there is one species that has been denominated the *sensitive fucus*, from its possessing the property of shrinking from the touch, and, indeed, from every thing warm : if brought near the fire, its edges begin to move and draw towards each other ; but if, while in this state, the finger be brought near them, the edges again retire, and resume their primitive position. Placed on a warm hand, all its parts appear convulsed, and it seems to writhe like an animal in excessive pain. This singular property can only arise from the peculiar structure of the leaf, which is compelled to yield to the repellent effluvia exuded from the hand. On many parts of our western coast *sponges* are frequently found, adhering occasionally to the solid rock, to large shells, and moveable stones : some of these sponges have projecting parts resembling leaves in a curling state ; others appear as solid oblong balls, which, in their central parts, inclose a fishy embryo ; and others, again, are full of large circular holes at the extremities of their tubercles, exhibiting, when taken from the water, a colour inclined to purple ; but, on being exposed to the air, they soon acquire that of a common sponge. Beneath each of this kind a cavity has always been discovered, from which it appears to have been a receptacle for some body possessed of animal life ; and it is not improbable that some species of the *crab* kind have found here a place to deposit their germs of future life.

Among the various substances which seem to unite the animal to the vegetable kingdom, the most remarkable is the *sea nettle*, so called from its affecting the hand in the same manner as the land nettle : these are generally called, by sailors and fishermen, *sea-blubbers*. They are of two kinds, those fixed to the rocks, and those that float in the water. The former kind is plentiful in almost all the pools

within the range of the tides. These vary in their colour, from the finest scarlet to the deepest purple, sprinkled over with beautiful yellow specks: they adhere so firmly to the rocks, that it is with difficulty they can be disengaged; and, in this state, they seem continually to wave their arms or feelers in search of food. This species furnishes many kinds; but the greatest variety is among those that float about. They swim in an oblique manner, contracting and expanding their extremities alternately, and promoting their rest or motion by their legs or feelers: their movements are very slow, and they fall a prey to every assailant.

The shades of evening now warn us to conclude our walk, and to bid adieu, for a few hours, to the interesting scenes of the ever-changing *Ocean*; but ere we return to partake the reviviscent beverage of China's leaf, let us open our friend *Bernard's* pretty little *pocket volume* of Poems, and read his

STANZAS,

Addressed to some Friends going to the Sea-Side.

* * *

I will not repine while remembrance can be
Still blest with the moments I've spent by the sea.

The ramble at morning, when morning first wakes,
And the Sun through the haze like a beacon-fire breaks;
Illumine to sea-ward the *billows'* white foam,
And tempting the loiterer ere breakfast to roam.

The stroll after breakfast, when all are got out;
The saunter, the lounge, and the looking about;
The search after *shells*, and the eye glancing bright,
If *cornelian*, or *amber*, should come in its sight.

Nor must I forget the last ramble at eve,
When the splendours of daylight are taking their leave;
When the Sun's setting beams, with a tremulous motion,
Are reflected far off on the bosom of Ocean.

This, this is the time, when I think I have found
The deepest delight from the scenery round:
There's a freshness in morning's enjoyments, but this
Brings with it a feeling of tenderer bliss.

I remember an evening, though years are gone by,
 Since that evening was spent—to my heart and my eye
 It is present, by memory's magical power,
 And reflects back its light on this far distant hour—

'Twas an evening the loveliest that Summer had seen,
 The sky was unclouded, the Ocean serene;
 The Sun's setting beams, so resplendently bright,
 On the billows were dancing like streamers of light.

So soothing the sounds were, which faintly I heard,
 They were sweeter than notes of the night-loving bird;
 And so peaceful the prospect before me, it seemed
 Like a scene of delight of which fancy had dreamed.

There's a pensive enjoyment the pen cannot paint;
 There are feelings which own that all language is faint;
 And such, on that eve, to my heart was made known,
 As I mused by the murmuring billows alone.

BERNARD HARTON.

OCTOBER.

Remarkable Days

IN OCTOBER 1823.

1.—SAINT REMIGIUS.

REMIGIUS was born at Landen, where he so closely pursued his studies, that he was supposed to lead a monastic life. After the death of Bennadius, he was, on account of his exemplary piety and extraordinary learning, chosen bishop of Rheims. Having held his bishopric 74 years, he died at 96 years of age, A.D. 535.

*5. 1821.—CLAUDIUS JOHN RICH DIED, ÆT. 35.

At Shiraz in Persia; author of the 'Memoirs of antient Babylon,' and late resident of the East India Company at Bagdad; to which station he was raised before the age of seventeen, in consequence of his great literary attainments and distinguished merits. He

was at Shiraz on his way to Bombay, when he was carried off by that fatal disease, the cholera morbus, the ravages of which, in that city, swept off, in the short space of five days, sixteen thousand persons. Such an affecting instance of *extended* mortality loudly calls for attention to the Divine admonition—*'There be ye also ready; for in such an hour as ye think not, the Son of Man cometh.'* Luke xii, v. 40.

Mr. Rich's untimely death will be the subject of most painful regret to many of his friends who remember his truly amiable character, together with his intense application and his ardent genius, by means of which he was enabled to make an almost unexampled proficiency in the Hebrew, Greek, Persic, Arabic, and Turkish, as well as in several European languages. Independently of his extraordinary acquirements, thus prematurely lost to the world, his death will excite additional regret in the mind of the Christian, from his having engaged, in the most decided manner, to promote the circulation of the Scriptures through Persia, and other parts of the East: an ample acknowledgment of his valuable services is contained in the records of the British and Foreign Bible Society.

6.—SAINT FAITH.

This virgin martyr suffered death under Dacianus, about the year 290, the most cruel torments being inflicted upon her. A great fair is held on this day at the village of St. Faith's, near Norwich, at which the gentry round about and from Norwich meet in gay attire.

*6. 1821.—JOHN COLEMAN'S JUBILEE.

Among the many illustrious characters with whom we have adorned our pages, we know not of any one whom we have introduced with more satisfaction than this rare instance of honest industry and fidelity. The Jubilee was celebrated at Walmer in Kent, in commemoration of Coleman's having completed a service of 50 years on one farm, viz. Walmer Court.

In the morning, the whole of his implements were displayed hanging in front of the Drum Inn, as trophies in honour of the day. In the evening, a considerable number of respectable inhabitants of the place assembled at the Drum Tea-gardens, where John Coleman, supported by two of his sons under a canopy of laurel, preceded by a band of music, and flags flying, and followed by his fellow workmen, two and two, and accompanied by a large concourse of people, proceeded to the houses of the principal inhabitants of the place; and it was truly gratifying to witness the reception he met with from each of them. On the approach to each house, the band formed in the lawn in front, playing 'God save the King,' while the worthy old man was met by the head of each family at the door, and welcomed and congratulated on the respect shown to him by his neighbours on the occasion: on leaving each house three hearty cheers were given, and, on returning to the Drum, he was met by the landlord and conducted to his seat, overhung with boughs of laurel, at the upper end of a large booth, erected on purpose, capable of containing upwards of 300 people, where, from the liberal subscription of many of the principal inhabitants of the neighbourhood, he and his fellow workmen partook of an excellent supper, and nearly a butt of beer was distributed to those who chose to partake of it. On the chairman giving the health of John Coleman, a bright example of honesty, industry, and integrity, with three, it was received and drunk with universal applause, and a succession of toasts followed, viz.—'The King,'—'The Proprietor of Walmer Court,'—'Lord Liverpool,'—'Lady Harvey and family,' &c. &c.: at intervals the band played several lively tunes, and the younger part of the company amused themselves with country dances, and in one of which John Coleman himself joined with one of his grand-daughters, with all the activity of a young man. This sur-

prising character is now 75 years of age, and never knew a day's illness: inured to hard work from his cradle, it became so habitual to him, that to this day he could no more live without employment, than any other man could live without food. He has brought up and educated eleven sons and daughters (several of whom are now living in respectable circumstances), without ever having received, and would even now disdain to receive, parochial relief: he is esteemed and respected by all who know him.

God to the human race
Indulgent prompts to necessary toil
Man, provident of life; with kindly signs
The seasons marks, when best to turn the glebe
With spade and plough, to nurse the tender plants,
And cast o'er fost'ring earth the seeds abroad.

ARATUS.

9.—SAINT DENYS.

Saint Denys, or Dionysius, the Areopagite, was converted to Christianity by St. Paul. See *Acts* xvii. He was, at first, one of the judges of the celebrated court of the Areopagus, but was afterwards made Bishop of Athens, where he suffered martyrdom for the sake of the gospel.—For an account of an antient tradition relative to St. Denis, see our last volume, p. 261.

11.—OLD MICHAELMAS DAY,

Still observed as the quarter day in many places, and as the end of one year, and beginning of another, in hiring servants.

*12. 1821.—WILLIAM ANGUS DIED,

Landscape Engraver, and eminent for his productions in this line. One of his principal works is his Collection of 'Views of the Seats of the Nobility and Gentry,' 1787-1815.

13.—TRANSLATION OF KING EDWARD THE CONFESSOR.

He was the youngest son of King Ethelred; but as all his elder brothers were either dead, or had fled

away, he succeeded to the crown of England in the year 1042. He collected all the most useful laws made by the Saxon and Danish kings. The additional title of Confessor was probably given him by the pope, for settling what was then called *Rome Scot*, but now is better known by the name of *Peter's Pence*.—For some pretty lines on this subject, see T. T. for 1815, p. 281.

*15. 1400'.—JOHN GOWER, POET, DIED,

Not long after this day; 'he lieth buried in St. Mary Overies church, or St. Mary's on the bank in Southwarke. He new builded a great parte of that church, and compiled three famous books. The *firste* in Latine, *Vox Clamantis*; the *seconde* in Frenche, *Speculum Meditantis*: the *thirde* in English, *Confessio Amantis*, which is in prynte; *Summarie of English Chronicles*.' Our learned antiquarian *Leland* tells us, that 'this *John Gower* was of the knightly order, and born in *Yorkshire*: that he was a lawyer by profession, and laboured much in poetry, and was the first polisher of his own countrey language, which before his time lay uncultivated, and almost quite rude: that he wrote many things in English, not only in verse, but also in prose, which were read with pleasure by the learned even in *his* time, the reign of King Henry VIII. He flourished in King Richard II's reign, to whom he dedicated his works; and, when he was blind, presented to him his Song in praise of Peace. He was an intimate friend and acquaintance of that eminent poet, *Geoffery Chaucer*, as he shows in this book, and used to submit his lucubrations to *his* judgment, as *Chaucer* did his *Loves of Troilus* to the censure and correction of *Gower* and *Strode*.'

*16. 1822.—MRS. GARRICK DIED, ÆT. 99!

This lady was the widow of the *inimitable* Garrick,

† Ritson, in his *Bibliographia Poetica*, says 1402.

who contributed so greatly to lessen the sum of human misery, by his mirthful exertions on the stage. Mrs. Garrick was in her *hundredth* year—and such was the state of her health and spirits, that, it is said, she was making arrangements to be present at the re-opening of Drury-lane Theatre, when—‘Death on the pale horse’ summoned her to act her part in ‘another and a better world.’

17.—SAINT ETHELDREDA.

She was a princess of distinguished piety, daughter of Anna, King of the East-Angles, and Hereswitha his queen, and was born about the year 630, at Ixning, a small village in Suffolk. In the year 673, she founded the conventual church of Ely, with the adjoining convent. Of this monastery she was constituted abbess, the monks and nuns living in society and regular order: it flourished for nearly two hundred years, but was destroyed, with its inhabitants, by the Danes, in 870.—See T.T. for 1814, p. 255.

18.—SAINT LUKE THE EVANGELIST.

Luke was born at Antioch, the metropolis of Syria, a place celebrated for the study of the liberal arts. The notion that he was a painter is without foundation, as it is not countenanced by antient writers. Dr. Lardner thinks that he might have been by profession a physician, as the expression ‘beloved physician,’ *Col. iv, 14*, seems to intimate. Luke lived a single life, and died in the 84th year of his age, about the year of Christ 70; probably a natural death.

25.—SAINT CRISPIN.

Crispinus and Crispianus, two brothers, were born at Rome; whence they travelled to Soissons in France, about the year 303, to propagate the Christian religion. Being desirous, however, of rendering themselves independent, they gained a subsistence by shoemaking. It having been discovered that they privately embraced the Christian faith, and endeavoured to make proselytes of the inhabitants, the

governor of the town immediately ordered them to be beheaded, about the year 308. From this time, the shoemakers chose them for their tutelar saints. There is a curious anecdote relative to this day in T.T. for 1816, p. 291.—The shoemakers of Edinburgh, and the principal towns of Scotland, meet annually on St. Crispin's-day to choose a king from among their own body, and celebrate the event with a grand pageant, an excellent supper, and a ball for their female friends.

28.—SAINT SIMON AND SAINT JUDE, *Apostles*.

Simon is called the *Canaanite*, from the Hebrew word *Cana*, to be zealous; hence his name of *Simon Zelotes*, or the Zealot, *Luke* vi, 15. After enduring various troubles and afflictions, he, with great cheerfulness, suffered death on the cross.

Jude is called both by the name of Thaddæus and Libbæus: *Matt.* x, 3, and *Mark* iii, 18. Jude, the brother of James: *Jude*, verse 1. And Judas, not Iscariot: *John* xiv, 22. He was of our Lord's kindred; 'Is not his mother called Mary, and his brethren James and Joses, and Simon and Judas?' *Matt.* xiii, 55. After great success in his apostolic ministry, he was, at last, for a free and open reproof of the superstitious rites of the Magi, cruelly put to death. He has left one epistle of universal concern to Christians.

*OCT. 1821.—POETICAL FRAGMENT FOUND

In the skeleton case at the Royal Academy, supposed to have been written by one of the students, and deposited there by him.

Behold this ruin—'twas a skull,
Once of ethereal spirit full.
This narrow cell was life's retreat—
This space was thought's mysterious seat:—
What beauteous pictures filled this spot!
What dreams of pleasure long forgot!
Nor love, nor joy, nor hope, nor fear,
Has left one trace or record here!

B b

Beneath this mouldering canopy
 Once shone the bright and busy *eye* ;
 But start not at the dismal void,
 If social love that eye employed—
 If with no lawless fire it gleamed,
 But through the dew of kindness beamed,
 The *eye* shall be for ever bright
 When stars and *suns* have lost their light.

Here in this silent cavern hung
 The ready, swift, and tuneful *tongue* ;
 If falsehood's honey it disdained,
 And where it could not praise, was chained—
 If bold in virtue's cause it spoke,
 Yet gentle concord never broke—
 That tuneful tongue shall plead for thee
 When death unveils eternity.

Say, did these *fingers* delve the mine,
 Or with its envied rubies shine?
 To hew the rock, or wear the gem,
 Can nothing now avail to them ;
 But if the page of truth they sought,
 Or comfort to the mourner brought,
 These hands a richer meed shall claim
 Than all that waits on wealth or fame.

Avails it, whether bare or shod
 These *feet* the path of duty trod ?
 If from the bow'rs of joy they fled,
 To soothe affliction's humble bed—
 If grandeur's guilty bribe they spurned,
 And home to virtue's lap returned—
 These feet with angels' wings shall vie,
 And tread the palace of the sky¹.

¹ These lines, though not *original*, are a very successful parody of a piece entitled '*Time's Lecture to Man*,' printed in the Orthodox Churchman's Magazine for 1801, vol. i, p. 403. As a specimen of this piece, we give a stanza which has not been imitated by the modern writers:—

See, not the least remains appear
 To show where Nature placed the *ear* :
 Who knows if it were musical,
 Or could not judge of sounds at all ?
 Yet, if it were to counsel bent,
 To caution and reproof attent,
 That ear shall with this sound be blest,—
 '*Well done, and enter into rest.*'

Astronomical Occurrences

In OCTOBER 1823.

SOLAR PHENOMENA.

THE Sun enters Scorpio at 19 m. after 5 in the morning of the 24th of this month; and he rises and sets during the same period in the following

TABLE

Of the Sun's Rising and Setting for every fifth Day.

October 1st, Sun rises 11 m. after 6.	Sets 49 m. after 5
6th, 22	6 38 5
11th, 32	6 28 5
16th, 41	6 19 5
21st, 51	6 9 5
26th, 1	7 59 4
31st, 11	7 49 4

Equation of Time.

If the following numbers be subtracted from the time as indicated by a good sun-dial, the remainders will be what should be shown by a well regulated clock at the same instant.

TABLE

Of the Equation of Time for every fifth Day.

Wednesday, Oct. 1st, from the time by the dial	subtract	m. s.
Monday, 6th,		10 8
Saturday, 11th,		11 40
Thursday, ... 16th,		18 2
Tuesday, 21st,		14 13
Sunday, 26th,		15 10
Friday, 31st,		15 50
		16 12

LUNAR PHENOMENA.

Phases of the Moon.

New Moon, 4th day, at 41 m. past	8 morning
First Quarter, 12th	7 2 3..
Full Moon, 19th	11 10 at night
Last Quarter, 26th	44 7 evening.

Moon's Passage over the Meridian.

The following times of transit are selected as affording suitable opportunities for observation during this month: viz.

October 10th, at	6 m.	after 5	in the evening
11th, ...	56	.....	5
12th, ...	43	.....	6
13th, ...	29	.....	7
14th, ...	18	.....	8
15th, ...	56	.....	8
16th, ...	38	.....	9 at night
17th, ...	22	.....	10
18th, ...	8	.....	11
26th, ...	46	.....	5 in the morning
27th, ...	41	.....	6
28th, ...	32	.....	7
29th, ...	22	.....	8
30th, ...	9	.....	9

PHENOMENA PLANETARUM.

Phases of Venus.

This planet still continues to decrease, and will totally disappear in the early part of this month, for on the 1st it will only appear in the telescope like a very narrow faint crescent.

October 1st, { Illuminated part = 0.36847 digits
 { Dark part = 11.63139

Eclipses of Jupiter's Satellites.

Both this and the following months afford the young astronomer some fine opportunities of observing these phenomena. The following are those that are visible this month: viz.

Immersion.

First Satellite, ..	3d day, at 28 m.	32 s.	after 5	in the morning
.....	4th	56 ..	50	11 at night
.....	12th	50 ..	10	1 in the morning
.....	19th	43 ..	29	6
.....	20th	11 ..	51	10 at night
.....	26th	36 ..	48	5 in the morning
.....	28th	5 ..	9	0
Second Satellite, ..	3d day, at 11 ..	11 .....	.....	0
.....	10th	47 ..	19	2
.....	17th	23 ..	36	5

Form of Saturn's Ring.

This phenomenon will exhibit a considerable opening this month, as the following will be the proportion of its axes: viz.

October 1st, { Transverse axis 1.000
 { Conjugate axis — 0.463

TABLE
Of the Meridional Transits and Altitudes of the
Planets.

	1st	7th	13th	19th	25th
TRANSITS.					
	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
Mercury	1 29 <i>aft.</i>	1 16	0 48	0 4	11 21 <i>mor.</i>
Venus	0 4 <i>aft.</i>	0 8	11 35 <i>mor.</i>	11 1	10 33
Mars	8 46 <i>mor.</i>	8 39	8 31	8 22	8 13
Jupiter	6 16 <i>mor.</i>	5 56	5 35	5 14	4 53
Saturn	3 0 <i>mor.</i>	2 37	2 14	1 50	1 26
G. Sidus	6 9 <i>aft.</i>	5 47	5 22	5 0	4 39
ALTITUDES.					
	<i>23° 2'</i>	<i>22° 4'</i>	<i>23° 10'</i>	<i>26° 49'</i>	<i>31° 3'</i>
Mercury	23° 2'	22° 4'	23° 10'	26° 49'	31° 3'
Venus	22 21	23 43	26 17	28 9	30 21
Mars	55 51	54 48	53 44	52 37	51 29
Jupiter	61 21	61 19	61 18	61 17	61 17
Saturn	54 46	54 41	54 35	54 28	54 21
G. Sidus	14 53	14 52	14 52	14 51	14 51

Other Phenomena.

Georgium Sidus will be in quadrature at 45 minutes past 4 in the afternoon of the 1st of this month, and Jupiter at a quarter after 1 in the morning of the 4th. On the 8th there will be an occultation of the bright star α in Scorpio by the Moon. The *Immersion* will take place at 24 m. 30 s. after 4, and the *Emersion* at 44 m. 30 s. past 5, in the afternoon. At the former instant, the star will be $21\frac{1}{4}'$ north of the Moon's centre, and at the latter it will be $\frac{1}{4}'$ south of the same point. Mercury will also be stationary on that day, and in his inferior conjunction at half past 4 in the morning of the 20th. Venus will be in conjunction on the 10th, at 45 m. after 10 at night; she will, of course, be wholly invisible at this time. The Moon will be in conjunction with Georgium Sidus at 34 m. after 5 in the morning of the 11th; with Jupiter, at 7 m. past 5 in the morning of the 25th; and with Venus at 22 m. past 2 in the afternoon of the 31st. Mars will be in conjunction with α in Leo on the 20th, the planet being at that time $61'$ north of the star. Jupiter will likewise be stationary on the 28th, and Mercury on the 29th.

It may be remarked here, that, in the Shetland Isles and the northern parts of Europe, the *Aurora Borealis* often makes its appearance this month, and though not a celestial, it is an atmospherical phenomenon, which has long attracted the attention both of philosophers and poets. While the former, however, have been unable to ascertain its nature, the latter have succeeded in giving beautiful descriptions of its appearance. Among these, *Thomson* thus admirably delineates its vivid playfulness:—

Silent from the north

A blaze of meteors shoot: ensweeping first
The lower skies, then all at once converge
High to the crown of Heav'n, and all at once
Relapsing quick, as quickly reascend,
And mix and thwart, extinguish and renew,
All ether coursing in a maze of light.

REFLECTIONS ON THE STARRY HEAVENS.

[Continued from p. 271.]

Having presented a brief description of the two signs which supply us with ready means of distinguishing the northern point of the heavens, and consequently of determining all the cardinal points of the compass, we shall offer a few observations on the *Zodiacal Signs*, which are so repeatedly mentioned in the course of our *Astronomical Occurrences*. The first of these is

ARIES (γ), the Ram.

Aries is the first of the *Zodiacal Signs*, and which, according to the reckoning of astronomers, who adopt the fixed and intellectual zodiac of Hipparchus, the Sun enters at the commencement of the vernal equinox, which is on the 20th of March, astronomical time. This is the beginning of the astronomical year: it is also from this point that the right ascension of the stars and the longitude of the heavenly bodies are computed. When the Sun enters this sign, he rises to the north pole, and the shadows of

night begin to envelope the opposite point of the heavens. The Earth at this time is in that part of its orbit which answers to the beginning of Libra, and consequently the Sun, which is seen in the opposite point, appears to be entering Aries. He is then vertical to the equator, and the circle which terminates light and darkness passes through the poles, and, cutting the equator and all its parallels at right angles, causes night and day to be equal in all parts of the globe, except the poles.

On this sign, and in reference to the preceding statements, Mr. Jamieson makes the following judicious and instructive remarks, at page 35 of his *Celestial Atlas*.—‘These are astronomical truths; but in nature the sign Aries has no part therein, its place being occupied by Pisces. More than 2000 years have passed away since the sign Aries, owing to the precession of the equinoxes, has ceased to open the astronomical year, as *Princeps signorum et Ductor exercitus Zodiaci*. In more remote times, the vernal equinox took place, and the year opened when the Sun was in Taurus. But when astronomers and legislators agreed to reform the Calendar according to the new style, the Ram, with which the year commenced, was called *Jubel*—the Jubelee was proclaimed and the New Year adopted. Herodotus tells us that once a year, on a certain day, at the festival of Jupiter Ammon, or the Sun in Aries, the people of Thebes, in Egypt, slew a ram. The Sun came into Aries on the 10th of the Jewish month Nisan. An annual feast was then celebrated, and a male ram was slain, to commemorate the deliverance from Egypt. At the period of the flight from Egypt, the vernal equinox took place when the Sun was in Aries.

‘The Greeks derive the symbol of this sign from the ram which produced the golden fleece that Jason brought from Colchis, about 1263 years before the Christian era. Popular opinion, however, traces

the name from the circumstance that the figures or symbols of the signs are Egyptian hieroglyphics, designed to represent those facts in Natural History peculiar to each month, as the Sun appears to pass progressively through the zodiac. At the time of the vernal equinox, sheep yean their lambs; and the sign of the zodiac corresponding to that period of the year was typified by their male parent the ram.

'Eusebius mentions that Ammon, the symbol of the Sun in Aries, was represented with a disk over his head. When the vernal equinox took place with the Sun in Taurus, Aries and Libra were then the uppermost signs in the lower hemisphere, which was expressed hieroglyphically by a wilderness. Hence Jupiter Ammon was fabled to have lived in a desert until he was brought out of it by Isis. Aries then seems to be the symbol of the Sun, who, after having descended to, and returned from, the lower hemisphere, contends for his place in the upper hemisphere, and the antients accordingly represent him as struggling against the constellations, which they typified by a ram butting with his horns. Among the Hebrew leaders, Aries was the ensign of Gad.

'On the ruins of Persepolis, *rams, bulls, lions, and archers*, are the common ornaments; and Francklin, who has given a minute sketch of this antient city, has furnished us with the means of determining the period when it was built. The Persian MS. which he has translated says, "King Gemsheed held a great festival, when the Sun, quitting the sign Pisces, entered that of Aries, and the year commenced; at which period he commanded all his people to assist at the building of the temple." About 4000 years ago, the ram, or lamb, became the leader of the signs, and the year opened with this new conductor of the heavenly host. For 2000 years, Aries was *Princeps signorum*, and 2000 years have passed away since Pisces became *Duces exercitus Zodiaci*. Persepolis must, then, have been built in the time of Abram.

Alexander the Great is said to have burnt it about the year 330 B.C. If, however, we take the mean between the destruction of this city and the commencement of the year with Aries, it had been built before the chronology of the Arundelian Marbles began, in 1582 B.C., or perhaps about the time that Atlas the astronomer flourished. Thus Astronomy becomes the parent of Chronology.

This sign Aries embraces 66 stars, but only one of them is of the 2d magnitude, one of the 3d, and two of the 4th. The principal of these is α *Arietis*, which is situated in the forehead of the Ram; but as most of the others are small, he does not present any conspicuous figure by which he can be readily distinguished, like either of those already described. The declination of α , as given by Mr. J, in the work above referred to, is $22^{\circ} 36' 30''$, and its right ascension $29^{\circ} 15' 30''$. It rises at the N.E. $\frac{1}{2}$ E. point of the compass, at London. Its time of rising, and passage over the meridian, on the first of each month, are as in the following table; its meridian altitude is $61^{\circ} 5' 30''$.

	<i>Rises.</i>		<i>Culminates.</i>			<i>Rises.</i>		<i>Culminates.</i>		
	<i>h.</i>	<i>m.</i>	<i>h. m.</i>			<i>h. m.</i>	<i>h. m.</i>			
January -	11	0	<i>mor.</i>	7 15	<i>aft.</i>	July - - -	10 50	<i>aft.</i>	7 5	<i>mor.</i>
February -	8	37	--	5 0	--	August - -	9 0	--	5 5	--
March - -	6	45	--	3 15	--	September -	7 0	--	3 8	--
April - -	4	56	--	1 15	--	October -	5 15	--	1 18	--
May - - -	3	0	--	11 36	<i>mor.</i>	November -	3 20	--	1 30	<i>aft.</i>
June - -	1	0	--	9 30	--	December -	1 15	--	9 30	--

TAURUS (τ), the Bull.

This is the second of the spring signs, which the Sun, according to the astronomical account, enters on the 20th of April, but in reality not till about the 12th of May. The Earth being now in Scorpio, the Sun appears in Taurus, and the length of day on the north side of the equator increases, while the light is diffused over a large track round the north pole during several complete revolutions of the Earth on its axis.

Grecian fable assigns the origin of this sign to the animal into which Jupiter is supposed to have

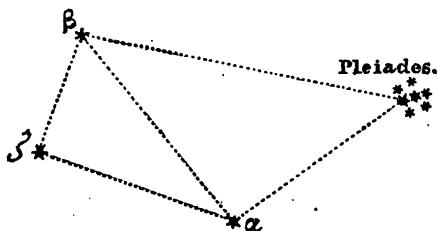
transformed himself when he carried off Europa; but in this symbol that ingenious and inventive people were doubtless anticipated; for the Bull was worshipped by many oriental nations, ages before the Greeks had a zodiac. In the days of Abram, this animal was considered as the leader of the signs, and the conductor of the heavenly hosts. The Indian and Persian monuments, as well as the Egyptian worship of *Apis*, so fully established by the Pentateuch, sufficiently show that this sign did not originate with the Greeks. One of the most natural modes of accounting for its derivation is, that at this period of the year the cattle usually bring forth their young, which was commemorated by placing the Bull in the heavens.

The vernal equinox took place about 4000 years ago, when the Sun was in Taurus; and for the space of nearly half that period the Bull was the prince and leader of the heavenly host. Numerous oriental monuments show how closely Eastern idolatry was connected with this symbol, representing the passage of the Sun from the lower to the upper hemisphere; and as 'long as the year commenced with the Sun in Taurus, the Persians represented Mithras as slaying a young bull. Even after the Ram or Lamb became the leader of the signs, the golden Calf, or golden Bull, the symbol of *Apis*, obtained the reverence of mankind.'

Passing by various other conjectures respecting the origin and meaning of this sign, the following remarks appear more deserving of attention: 'The installation of *Apis*, in which the soul of the great Osiris was supposed to subsist, was exceedingly splendid, and his festivals were annually attended with great veneration and pomp for seven successive days. The festival commenced about the 12th or 13th of the month Payn, which corresponded with the 17th or 18th of June, and was called the birth of *Apis*. Before the 32d Pharaoh, called Aseth, the solar year consisted of 360 days: this prince added

five days more to complete its course; and in his reign a Calf was placed among the gods, and named *Apis-Taurus excelsus*. The intercalation of the five days introduced into the mythology Osiris, Arueris, Typhon, Isis, and Nephte. This was the reformation of the Calendar which the kings at their inauguration were obliged to swear they would not alter, by inserting months or days, but that it should remain as established by the antients. The discovery of the real period of the solar year did not, however, prevent the use of the civil and of the vague year among the Egyptians, which was not remedied except among the learned. The worship of Apis among the Egyptians probably suggested the first idea of making altars with horns. I apprehend "the embalmed Bull," which M. Belzoni found in one of the sepulchres of the Egyptian kings at Gournou, was the symbol of the god Osiris, or perhaps of the Sun in Taurus. Thebes, says this enterprising traveller, in the vicinity of which Gournou is situated, had arrived at its glory, under *Osiris*, in a period of "antiquity that reaches far beyond all historical notice."

Taurus has Gemini on the east, Orion and Eridanus on the south, and Aries on the west. It con-



tains 141 stars, the principal of which may readily be found in the heavens by means of the following combinations and the diagram. Aldebaran (α); the Pleiades, with β and ζ in the tips of the horns (which are on the borders of the milky way), form a trapezoid. The Pleiades, Aldebaran, and β in the tip of

the northern horn, constitute an obtuse angled triangle, with the angle at Aldebaran a little more than a right angle. Aldebaran, β and ζ , also form an acute angled triangle, the angle at the last of these three stars falling very little short of a right angle.

Though the *Hyades* and the *Pleiades* are sometimes represented as distinct constellations, they are only component parts of that of *Taurus*. The *Hyades* are the feigned daughters of *Atlas* and *Pleone*. They are composed of numerous small stars surrounding Aldebaran, which forms the right eye of the Bull, and is a star of the 1st magnitude, whose latitude is $5^{\circ} 29' 40''$ south, and longitude $6^{\circ} 32' 9''$ of *Gemini*. 'The Arabians call it *Ain-al-tor*, "the bull's eye;" but *Al-Debiron* signifies "he went before, or led the way," points to a period in the history of astronomy, when this star was the foremost, or most illustrious among the celestial host, *Taurus* being then the first of the signs. The *Hyades*, it is also said, were antiently called *Debaroth*, of which the brilliant was named *Al-Debaran*; but *al* or *el* was the name of *Sol*, and *Deborah* or *Debaran* has been translated *order*, *march*, *series*; the march of the celestial hosts would then be typified by the asterism *Aldebaran*.' The declination of Aldebaran, in 1820, was $16^{\circ} 8' 24''$ N. and its right ascension $66^{\circ} 23' 52''$. It rises at London nearly on the N.E. by E. $\frac{1}{2}$ E. point of the compass. Its meridian altitude is $54^{\circ} 37' 24''$, and the time of its rising and culminating, or passing the meridian of that city, is given in the following table:—

	<i>Rising.</i>		<i>Culminating.</i>			<i>Rising.</i>		<i>Culminating.</i>	
	<i>h.</i>	<i>m.</i>	<i>h.</i>	<i>m.</i>		<i>h.</i>	<i>m.</i>	<i>h.</i>	<i>m.</i>
January -	2	15	<i>aft.</i>	9 37	<i>aft.</i>	July - - -	2 10	<i>mbr.</i>	9 42
February	0	2	- -	7 25	- -	August - - -	0 15	- -	7 34
March - -	10	10	<i>mor.</i>	5 37	- -	September -	10 10	<i>aft.</i>	5 42
April - -	8	6	- -	3 43	- -	October - - -	8 30	- -	8 54
May - - -	6	15	- -	1 53	- -	November -	6 35	- -	1 58
June - -	4	15	- -	11 46	<i>mor.</i>	December -	4 30	- -	11 55

Aldebaran is one of those stars which are fre-

quently employed by sailors for determining the course and position of their vessel, either by means of its altitude or its distance from the Moon; whence the longitude of the place of observation may be found from the chronometer.

The *Pleiades* are situated on the neck of the bull, north-west of the *Hyades*; they consist of seven small bright stars, the largest of which is of the 3d magnitude, and is called *Lucida Pleiadum*. This group passes vertically over the deserts of Arabia, Bengal, the southern parts of China, California, and the Straits of Florida. It was obviously one of those which attracted early notice, as the various allusions to it in the writings of antiquity sufficiently prove. *JOB* mentions the *Pleiades* (ix, 9) in conjunction with *Arcturus* and *Orion*.

[To be continued.]

The Naturalist's Diary

For OCTOBER 1823.

When I see leaves drop from their trees, in the beginning of Autumne, just thus, thinke I, is the friendship of the world. While the sap of maintenance lasts, my friends swarme in abundance; but in the winter of my need, they leave me naked. He is an happy man that hath a true friend at his need: but he is more truly happy that hath no need of his friend.—*Warwick's Spare Minutes*.

To a contemplative mind few pleasures afford more gratification than an autumnal morning's ramble: each season furnishes its own enjoyments and has its separate votaries; but there are accompaniments to that of autumn, independent of the peculiar temperament of the air, which are singularly impressive; it is, however, the *woodlands* now that exhibit the most strongly marked character; many of the mossy tribe, at this season, are in full verdure, and the root of an old tree becomes a landscape with its mountains and forests; for, as an old poet says,

oft the small flower layeth
Its fairy gem beside the giant-tree.

C C

The lichen is advancing in all its various forms; the *fungi*, in this and the succeeding month, are found in all their splendour, and with a variety and elegance of appearance of which an observer only can be fully sensible: what can be more beautiful than to see these highly decorated children of Flora in all their youthful freshness and splendour? The verdigris agaric (*ag. aruginosus*) just-risen from its humid, mossy bed shining with the morning dew, its veil festooned around it, besprinkled with gems of moisture, glittering like a circlet of emeralds and topazes, must be the admiration of all who view it! The *squirrel*, gambolling round the root of an antient oak, whose base perhaps is overgrown with the dew-berry bush (*rubus.casius*), its fruit mature, covered with unsullied bloom; the *spider* watching immoveable in the centre of his toils; the *nut-hatch* cleaving his prize in the hollow of some dry bough; the loud laugh of the *green woodpecker*, full of hilarity; the scream of the *jay*, are all symbols of this season, and are distinctly marked in the silence and loneliness of the scene, forming a series of accompaniments which make a sensible and perhaps more permanent impression on the memory, than the verdant promises of Spring, or the profusion of Summer: the young mind which can feel and understand these delights of the country, will say, with the poet,

Oh, let me still with simple Nature live,
My wild field-flowers on her altar lay;
Enjoy the blessings that she meant to give,
And calmly pass an inoffensive day.

In this month, some summer birds of passage, of which the *swallow* is the first, take their departure for warmer regions, returning to us in the spring. Many of the small-billed birds that feed on insects disappear when the cold weather commences. The *throstle*, the *red-wing*, and the *fieldfare*, which migrated in March, now return; and the *ring-ouzel* arrives from the Welsh and Scottish Alps to winter

in more sheltered situations. About the middle of the month, the common martin disappears; and, shortly afterwards, the smallest kind of swallow, the sand-martin, and the stone-curlew, migrate. The Royston or hooded crow (*corvus cornix*) arrives from Scotland and the northern parts of England, being driven thence by the severity of the season. The woodcock returns, and is found on our eastern coasts.

Migrating birds may be divided into two classes, from the different seasons of the year in which they arrive or depart. To the first class will belong those birds which arrive in this country in the spring, and depart from it in autumn, and are termed *Summer Birds of Passage*. The second will include those which arrive in autumn, and depart in spring, and are called *Winter Birds of Passage*.

The SUMMER BIRDS OF PASSAGE are not confined to any particular order or tribe; nor are they distinguished by similarity of habits. Some of them belong to the division of *water fowls*, as the terns and gulls; while others are *land birds*, as the swallow and corn-crake. They differ also remarkably with regard to their food. Thus, the hobby is carnivorous; the gulls and terns, piscivorous; the swallow, insectivorous; and the turtle dove and the quail, granivorous. They, however, present one point of resemblance. All of them, during their residence in this country, perform the important offices of pairing, incubation, and rearing their young; and hence may, with propriety, be termed the natives of the country. We hail their arrival as the harbingers of spring, and feel the blank which they leave on their departure, although it is, in some measure, supplied by another colony of the feathered race, who come to spend with us the dreary months of winter.

The swallow, about whose migrations so many idle stories have been propagated and believed, departs from Scotland about the end of September, and from England about the middle of October. In the latter month M. Adanson observed them on the

shores of Africa after their migrations from Europe. He informs us, however, that they do not build their nests in that country, but only come to spend the winter. M. Prolong has not only confirmed the observations of Adanson in reference to swallows, but has stated, at the same time, that the yellow and grey wagtails visit Senegal at the beginning of winter. The former (*motacilla flava*) is well known as one of our summer visitants. The *nightingale* departs from England about the beginning of October, and from the other parts of Europe about the same period. During the winter season it is found in abundance in Lower Egypt, among the thickest coverts, in different parts of the Delta. These birds do not breed in that country, and to the inhabitants are merely winter birds of passage. They arrive in autumn and depart in spring, and at the time of migration are plentiful in the islands of the Archipelago. The *quail* is another of our summer guests, which has been traced to Africa. A few, indeed, brave the winters of England, and in Portugal they appear to be stationary. But, in general, they leave this country in autumn, and return in spring. They migrate about the same time from the eastern parts of the Continent of Europe, and visit and revisit, in their migrations, the shores of the Mediterranean, Sicily, and the islands of the Archipelago.

While these birds perform those extensive migrations which we have here mentioned, others are contented with shorter journeys. Thus, the razor-billed auk (*alca torda*), and the puffin (*alca arctica*), frequent the coast of Andalusia during the winter season, and return to us in the spring.

These facts, and many others of a similar nature, which might have been stated, enable us to draw the conclusion, that our summer birds of passage come to us from southern countries, and, after remaining during the warm season, return again to milder regions. A few of our summer visitants may winter in Spain or Portugal; but it appears that, in general,

they migrate to Africa, that unexplored country possessing every variety of surface, and consequently great diversity of climate. It is true that we are unacquainted with the *winter retreats* of many of our summer birds of passage, particularly of small birds; but as these arrive and depart under similar circumstances with those whose migrations are ascertained, and as the operations which they perform during their residence with us are also similar, we have a right to conclude that they are subject to the same laws, and execute the same movements. What gives weight to this opinion, is the absence of all proof of a summer bird of passage retiring to the north during the winter season.

To a BIRD of PASSAGE.

*Away! away! thou Summer Bird,
For Autumn's moaning voice is heard,
In cadence wild and deepening swell,
Of Winter's stern approach to tell.*

*Away! for vapours, damp and low,
Are wreathed around the mountain's brow;
And tempest-clouds their mantles fold
Around the forest's russet gold.*

*Away! away! o'er earth and sea,
This land is now no home for thee!
Arise! and stretch thy soaring wing,
And seek elsewhere the smiles of Spring!
The wanderer now, with pinions spread,
Afair to brighter climes has fled,
Nor casts one backward look, nor grieves
For those sere groves whose shade he leaves.*

*Why should he grieve? the beam he loves
Shines o'er him still where'er he roves,
And all these early friends are near
Who made his Summer-home so dear.*

*Oh! deem not that the tie of birth
Endears us to this spot of earth;
For wheresoe'er our steps may roam,
If friends are near, that place is home!*

*No matter where our fate may guide us,
If those we love are still beside us!*

Literary Gazette.

The WINTER BIRDS OF PASSAGE have more points of resemblance among themselves than those of the former division. They chiefly belong to the tribe of *water-fowls*. None of them are insectivorous, and very few are granivorous. They principally frequent the creeks and sheltered bays of the sea, and the inland lakes, or they obtain their food in marshy grounds, or at the margins of springs. When the rigours of the season are over, and when other birds which are stationary are preparing for incubation, these take their departure, to be again succeeded by our summer visitants.

The snow-bunting (*emberiza nivalis*), which is among the smallest of our winter guests, retires to the hoary mountains of Spitzbergen, Greenland, and Lapland, and there executes the purposes of incubation, making its nest in the fissures of the rocks. In these countries it is, therefore, a *summer visitant*, as it retires southward in autumn, to spend the winter in more temperate regions. To the sea-coasts of the same countries, the little auk (*alca alle*), and the black-billed auk (*alca pica*), repair for similar purposes as the snow-flake. The *woodcock* winters with us, but retires in the spring to Sweden, Norway, and Lapland. The fieldfare and the redwing resemble the woodcock in their migrations, depart at the same season, and retire for similar purposes to the same countries. These instances may suffice to support the conclusion, that all our winter birds of passage come from northern countries, and that the winter visitants of the south of Europe become the summer visitants of its northern regions. This is evidently an arrangement depending on the same law by which the African winter visitants become the summer birds of passage in Europe.

That these periodical movements take place, in order to guard against the vicissitudes of the seasons, must appear obvious to all, from the consideration of the facts which have been stated. An early winter brings the migrating birds from the north to

this country before their usual time, and an early spring hastens the arrival of our summer visitants. In the beginning of winter the snow-bunting is found only in the high grounds, and it descends to a lower level with the increasing severity of the season.

Attempts have been made to preserve these birds during the summer season in this country, but, although liberally supplied with food, they have not survived. The experiment has succeeded, however, in America, with General Davies, who informs us, (Linn. Trans. vol. iv, p. 157) that the *snow-bird* of that country always expires in a few days after being caught (although it feeds perfectly well), if exposed to the heat of a room with a fire or stove; but being *nourished with snow*, and kept in a cold room or passage, will live to the middle of summer: a temperature much lower than our summer heat proving destructive to these birds. The swallow, on the other hand, seems to delight in the temperature of our summer, and, at that heat, to be able to perform the higher operations of nature. When attempted to be kept during our winter, besides a regular supply of food, care must be taken to prevent it from being benumbed with cold.¹

A flight of about 20 or 30 of the cross-bill (*loxia curvirostra*), in some places an unknown bird, and of rare occurrence in all parts of England, made its appearance in the beginning of October 1821, in the orchards about Oldbury and Littleton on Severn (Gloucestershire), committing great havock among the apples. We have no certain evidence that the cross-bill breeds in England, but a few years past a pair of these birds were shot about two miles distant from the same place on the 3d of August: the breast-bone and lower parts of the body of the female were divested of feathers, as is customary with brooding birds; from this circumstance, and

¹ See Dr. Fleming's very excellent 'Philosophy of Zoology,' lately published, vol. ii, pp. 30, et seq.

from their being found with us at this period of the year, it is probable that there was a nest in the neighbourhood.

Small birds begin now to congregate: the common linnet (*fringilla linaria*) is the first to lead the way, and immediately after rearing its brood it unites with its fellows and forms large associations: they are very cheerful, cleanly birds, and delight in consorting upon the head of some sunny tree, where they will dress and adjust their plumes with the greatest care, chattering with each other in the sunny beam by the hour together, in a low kind of symphony, in which all seem to unite: this, heard at a little distance, forms a very pleasing concert, joyous and innocent. The prattle is not only observable when in company with each other, but it is their constant custom thus to amuse themselves during any occasional bright, warm morning through the autumn or winter season: in the pairing time they separate, and then they utter only a few notes, a weak but cheerful harmony. The linnet is so fond of society, that, like a few other birds, several pairs of them build their nests, and rear their offspring, in the neighbourhood of each other; and a favourite field of gorse, in this season, becomes animated with these harmless little creatures.

Various kinds of *waterfowl* make their appearance; and, about the middle of the month, *wild geese* leave the fens, and go to the rye lands, to devour the young corn. *Rooks* sport and dive, in a playful manner, before they go to roost, congregating in large numbers. The starling (*sturnus vulgaris*) sings. (See T.T. 1821, p. 255.) The *awk* or *puffin* visits, for the purpose of incubation, some of the rocky isles of Britain, in amazing numbers.

On the appearance of the *gossamer* in this month, see T.T. for 1820, pp. 261-264; and on the *gamma-moth*, consult T.T. 1821, p. 257.

The following *flowers* are now in blow: holly-heck, Michaelmas daisy, stocks, nasturtian, marigold, mig-

nionette, lavender, wall-flower, china rose, virginia stock, heart's ease, laurustinus, rocket, St. John's wort, periwinkle, china asters, chrysanthemums, and American groundsel; the *alkekengi* now holds up its scarlet bladders encompassing a scarlet cherry full of seeds. But chiefly the *dahlia*, a flower now in general cultivation, exhibits its majestic and brilliant splendour of stars above its dark green stalks and leaves.—See T.T. 1821, pp. 258-260, for a description of the two species of dahlia usually grown, with full directions for rearing them.

Although this month is, in a great measure, devoid of *floral attractions*, yet fruits and *seeds* now claim our attention, and deserve our examination. What an amazing difference between an *acorn* and a stately *oak*! The seeds of plants may be compared to the chrysales of butterflies. The seed, like the chrysalis, contains, in miniature, all the parts of the future plant. These parts require only time, and other circumstances necessary to vegetation, for their complete evolution. How different are the seed-leaves from those of the plume! Beside the general changes arising from growth, plants undergo a number of metamorphoses from other causes. In northern climates, if we except a few evergreens, *trees*, during winter, are entirely stripped of their leaves. Instead of the pleasant emotions excited by the variety of figures, movements, colours, and fragrance of the leaves, flowers, and fruit, during the spring and summer, nothing is exhibited in winter but the bare *stems* and *branches*. In this state, the trees of the forest have a lugubrious appearance. Very different are the emotions we feel in spring, when the *buds* begin to burst, and the *leaves* to expand. When summer approaches, another beautiful change takes place. The *flowers*, with all their splendour of colours and sweetness of scents, are then highly delightful to our senses. After performing the office of cherishing and protecting the tender fruit for some time, the flowers drop off, and a new change is ex-

hibited. When the flowers fall, the young fruit appears, and gradually grow to maturity, perpetually presenting varieties in their magnitude, colour, odour, and flavour. When the fruit and seed are fully ripe, they are gathered for the use of man, drop down upon the earth, or are devoured by birds and other animals. After this change happens, to which all the others were only preparatory, the leaves begin to shed, winter commences, and the same series of metamorphoses goes on during the existence of the plant. The changes just now mentioned are *annual*, and are ultimately intended to supply men and other animals with food. But plants are subjected to changes of form from causes of a more accidental nature. Varieties or changes in the figure of plants are often produced by soil, by situation, by culture, and by climate.

Hips and *haws* now ornament the hedges. The berries of the bryony and the privet; the barberry, the blackberry, the holly, and the elder—from which is made the famous winter wine of Old England's peasantry—with sloes, bullaces, and damsons, are now in great plenty.

The chief *harvest of apples* takes place about the end of October; very little cider proves good unless it be made at this time, or in November and December: cider is sometimes made as late as Christmas. The apples which ripen early, rarely if ever make good cider. The counties of *Herefordshire*, *Worcestershire*, *Somersetshire*, and *Devonshire*, are celebrated for the manufacturers of *cider* and *perry*. *Herefordshire* is particularly famous as a *cider* country. It is a mistake to suppose that the *golden pippin* and some other varieties of the apple are extinct. They are still to be obtained in some districts of England.

The *vintage*, or harvest of grapes, as important to foreigners as the *corn* harvest is to us, takes place in October; and the vineyards of France, Germany, Switzerland, Italy, &c. &c. now resound with the

cheerful songs of the peasantry, at the conclusion of their labours. The following lines from 'Italy, a Poem,' contain a brief, but pretty sketch of the '*Vintage at Como*.'

Along the shores, among the hills 'tis now
The hey-day of the Vintage; all abroad,
But most the young and of the gentler sex,
Busy in gathering; all among the vines,
Some on the ladder, and some underneath,
Filling their baskets of green wicker-work,
While many a canzonet and frolic laugh
Come through the leaves; the vines in light festoons
From tree to tree, the trees in avenues,
And every avenue a covered walk
Hung with black clusters. 'Tis enough to make
The sad man merry, the benevolent one
Melt into tears—so general is the joy!
While up and down the cliffs, over the lake,
Wains oxen-drawn, and panniered mules are seen,
Laden with grapes, and dropping rosy wine.

October is the principal month for brewing beer, whence the name applied to very strong beer of OLD OCTOBER. In this month also is the great *potatoe* harvest. The corn harvest being over, the stone-pickers go out again.

The sowing of wheat is generally completed in this month: when the weather is too wet for this occupation, the farmer ploughs up the stubble fields for winter fallows. *Acorns* are sown at this season, and the planting of *forest* and *fruit* trees takes place.

The interesting scenery of this month, as displayed in the various colours assumed by the *fading leaves of trees and shrubs*, as well as the general character of autumn, are admirably described by an anonymous poet.

STANZAS written in a PARK in SURREY, OCTOBER 1820.

The earlier frosts had long begun
Their work on ev'ry tenderer tree,
And nearly banished, one by one,
Blithe summer's tints of greenery;
For every bough's extremity

Turned slowly to an alien hue;
The *ashes* faded to a yellow,
The *times* became all sickly fallow,
And tawney-red the *hawthorns* grew.

The *beeches*' gloss fled fast away,
And left them brown as iron ore;
And e'en the old *oak's* outer spray
Marks of this nightly searing bore;
And yester eve, the frequent shower
Shrouded the moon in wat'ry gloom,
And drenched the branches drooping low;
And now, a more relentless foe!
Hoarse wind of AUTUMN, thou art come!

By the loud uproar of the din,
Poured thro' yon swaying avenue;
Whose arching *elms*, to one within,
Appear some huge cathedral view;
And by those flickering leaves that strew
The late uncumbered tracks of deer—
And by that tossing *pine*, which fast
Stoops like some drifting shallop's mast,
Hoarse wind of *Autumn*, thou art here!

See how the *deer* are crowding round
Yon group of patriarchal *oaks*,
Whose wide-extended limbs rebound
Against the blast's assiduous strokes:
The dappled herd, with anxious looks,
And heads all earthward bending, move,
To pry where anburn acorns rest
New shaken from their cups above,—
And glean a rich autumnal feast.

Aye, *wind of Autumn*, wild and rude
Thou com'st to rend, with ruthless hand,
The sickening foliage of the wood;
For all that Spring, with nurture bland,
Of mild and tepid breezes fanned,
And fed with balmy dew and shower,
And all that Summer's sunny sky
Disclosed in rich maturity,
Must sink before thy wasting power.

Thy hands are busy, noisy blast,
In stripping each discoloured tree
Of *shoals of leaves* which flutter past—
Their ruin this, but sport to thee.
And though thy violence we see,

Now tearing down a load, and now,
 But what would fill an infant's hand ;
 Yet ere thou goest, each tree shall stand
 With trunk unveiled, and leafless bough.

Yet no—the *oak* and *beech* shall still
 Hold to the south some garland sere,
 Nor lose these hard-kept honours till
 The winter-wind, thy wild compeer,
 Roar still more loudly in the ear.
 And see, the *holly* stands secure,
 It scorns you both, defies your bluster,
 Nor loses leaf, nor coral cluster,
 Unless for Christmas garniture.

Like leaves from some deciduous tree,
 Since youthful fancies fall away,
 Oh, may I like you *holly* be,
 And gain those stabler tastes, which stay,
 Nor, as life's seasons change, decay !
 May I accomplishments possess,
 To make me—like the *holly* bow'r—
 Retain a cheering leafiness,
 Yea, even in age's wintry hour.

NOVEMBER.

Remarkable Days

In NOVEMBER 1823.

1.—ALL SAINTS.

IN the early ages of Christianity the word *saint* was applied to all *believers*, as is evident in the use of it by Saint Paul and Saint Luke; but the term was afterwards restricted to such as excelled in Christian virtues.—For some rural customs on this day, see T. T. for 1814, pp. 278-9. See also our last volume, p. 90.

Hallowe'en is the eve of this day, on which many
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superstitious ceremonies are still observed in distant parts of the United Kingdom. The provincial proverb of 'To speak *puling*, like a beggar at *Hallowmas*,' is thus explained: About the feast of All Saints, the poor people in Staffordshire, and probably in Warwickshire, go from parish to parish a *souling*, as they call it; i. e. begging and *puling* (or singing small) for soul-cakes, or any good thing to make them merry.

2.—ALL SOULS.

In Catholic countries, on the eve and day of All Souls, the churches are hung with black; the tombs are opened; a coffin covered with black, and surrounded with wax lights, is placed in the nave of the church; and in one corner, figures in wood, representing the souls of the deceased, are halfway plunged into the flames.

5.—KING WILLIAM LANDED.

The glorious revolution of 1688 is commemorated on this day, when the throne of England became vested in the illustrious House of Orange. Although King William landed on the 5th of November, as is specified in the prayers of the Church for that day, the almanacks still continue the mistake of marking it as the *fourth*.

5.—POWDER PLOT.

This day is kept to commemorate the diabolical attempt of the Papists to blow up the Parliament House. The best account of this nefarious transaction is detailed in Hume's History of England, vol. vi, pp. 83-88 (8vo edition, 1802).—See also T.T. for 1814, p. 280.

6.—SAINT LEONARD.

Leonard, or *Lienard*, was a French nobleman of great reputation in the court of Clovis I; he was instructed in divinity by Remigius, Bishop of Rheims, and afterwards made Bishop of Limosin. Several miraculous stories are told of him by the monks, not

worth relating. He died about the year 559, and has always been implored by prisoners as their guardian saint.

9.—LORD MAYOR'S DAY.

The word *mayor*, if we adopt the etymology of Verstegan, comes from the antient English *maier*, able or potent, of the verb *may* or *can*. King Richard I, A.D. 1189, first changed the bailiffs of London into Mayors; by whose example others were afterwards appointed.—See T.T. for 1818, p. 278, and for 1821, p. 269, for some pleasing lines on this day. A minute description of the Lord Mayor's Show, as it was managed in the year 1575, will be found in T.T. for 1820, p. 274.

11.—SAINT MARTIN.

He was a native of Hungary, and for some time followed the life of a soldier; but afterwards took orders, and was made Bishop of Tours in France, in which see he continued for twenty-six years. Martin died about the year 397, much lamented, and highly esteemed for his virtues.—For some lines on this day, see T.T. for 1821, p. 271.

In some parts of England, the fine open weather which is *occasionally* experienced at the commencement of this month,—the last, lingering look of Autumn,—is termed *St. Martin's little Summer*.

*12. 1381.—ORDER OF FOOLS INSTITUTED.

On St. Cunibert's day, Adolphus, Count of Cleves, in conjunction with the Count de Meurs and thirty-five noblemen of Cleves, instituted this order under the appellation of '*d'Order van't Geeken Geselschap*.' The original patent of creation was formerly preserved in the archives of Cleves, which, however, were totally destroyed by the French revolutionists upon their first irruption into Germany; and the only genuine copy of it which now exists, and of which, for the information of the curious, we have subjoined

a translation, is to be found in Von Buggenhagen's Account of the Roman and National Antiquities, &c. discovered at Cleves. To this document are affixed thirty-six seals, all imprinted on green wax, with the exception of that of the founder, which is on red wax and in the centre of the rest, having on its right the seal of the Count de Meurs, and on its left that of Deidrich van Eyl. The insignium borne by the knights of this order on the left side of their mantles consisted of a *fool*, embroidered in a red and silver vest, with a cap on his head, intersected harlequin-wise with red and yellow divisions and gold bells attached, with yellow stockings and black shoes: in his right hand was a cup filled with fruits, and in his left a gold key, symbolic of the affection subsisting between the different members.

It is uncertain when this order ceased; although it appears to have been in existence at the commencement of the sixteenth century, when, however, its pristine spirit had become totally extinct. The latest mention that has hitherto been found of it occurs in some verses prefixed by Onofrius Brand to the German translation of his father Sebastian Brand's celebrated '*Navis Stultifera Mortalium*,' by the learned Dr. Geiler von Kaisersberg, which was published at Strasburg in the year 1520.

Two-fold was the purpose of the noble founders of this order; to relieve the wants and alleviate the miseries of their suffering fellow-creatures, and to banish ennui during the numerous festivals observed in those ages, when the unceasing routine of disports and recreations, which modern refinement has invented in the present, were unknown. During the period of its meeting, which took place annually and lasted seven days, all distinctions of rank were laid aside, and the most cordial equality reigned throughout. Each had his particular part allotted to him on those occasions, and those who supported their characters in the ablest manner contributed most to

the conviviality and gaiety of the meeting. Indeed, we cannot but be strongly prepossessed in its favour, when we recur to the excellent regulations which accompanied its institution, and were admirably calculated to preserve it, at least for a great length of time, from degenerating into absurdity and extravagance.

We must not confound this laudable establishment with the vulgar and absurd practices which, till of late years, existed in many places under the names of *Feasts of Fools and of the Ass*¹, &c. These were only national festivals, intended for the occasional diversion, or, as in those days they were termed, rites to promote the pious edification of the lower classes, which, 'not unfrequently introduced by a superstition of the lowest and most illiberal species,' soon became objects of depravity and unbridled licentiousness. Of a totally different nature also, and analogous only in quaintness of appellation, were the societies established by men of letters in various parts of Italy, such as the society of the '*Insensáte*' at Perugia, of the '*Stravaganti*' at Pisa, and the '*Eterbelyti*' at Pesaro. Nor can we allow ourselves to pass over in silence, on the present occasion, the Order or Society of Fools, otherwise denominated '*Respublica Babinepsis*,' which was founded towards the middle of the fourteenth century by some Polish noblemen, and took its name from the estate of one Psomka, the principal instigator, near Leublin. Its form was modelled after that of the constitution of Poland; like this, too, it had its king, its council, its chamberlain, its master of the hunt, and various other offices. *Whoever made himself ridiculous by any singular and foolish propensity, on him was conferred an appointment befitting it.* Thus, he who carried his partiality to the

¹ For an account of the *Feast of the Ass*, see *Time's Telescope* for 1822, pp. 296, 297.

canine species to a ridiculous extreme, was created master of the hunt; whilst another, who constantly boasted of his valorous achievements, was raised to the dignity of field marshal. No one dared to refuse the acceptance of such a vocation, unless he wished to become a still greater object of ridicule and animadversion than before. This order soon experienced so rapid an increase of numbers, that there were few at court who were not members of it. At the same time it was expressly forbidden that any lampooner should be introduced among them. The avowed object of this institution, was to prevent the rising generation from the adoption of bad habits and licentious manners; and ridiculous as was its outward form, is not its design, at least, entitled to our esteem and veneration?

Patent of Creation of the ORDER of FOOLS.

‘ We all, who have hereunto affixed our seals, make known unto all men, and declare, that after full and mature consideration, both on our own behalf and on account of the singular good-will and friendship which we all bear, and will continue to bear towards one another, we have instituted a society of Fools, according to the form and manner hereunto subjoined :—

‘ Be it therefore known, that each member shall wear a fool, either made of silver, or embroidered, on his coat. And such member as shall not daily wear this fool, him shall and may any one of us, as often as he shall see it, punish with a mulct of three old great tournois (livres tournois, about four-pence halfpenny), which three tournois shall be appropriated to the relief of the poor in the Lord !

‘ Further, will we Fools yearly meet, and hold a conventicle and court, and assemble ourselves, to wit at Cleves, every year on the Sunday after Michaelmas-day; and no one of us shall depart out of the city, nor mount his horse to quit the place where we may be met together, without previous notice, and his having defrayed that part of the expences of the court which he is bound to bear. And none of us shall remain away on any pretence or for any other reason whatsoever than this, namely, that he is labouring under very great infirmity; excepting moreover those only who may be in a foreign country, and at six days’ journey from their customary place of residence. If it should happen that any one of the society is at enmity with another, then must the whole society use their utmost endeavours to adjust their differences and reconcile them; and such members and all their abettors shall be excluded from appearing at the court on the Friday morning

when it commences its sitting at sun-rise, until it breaks up on the same Friday at sun-set.

‘ And we will further at the royal court yearly elect one of the members to be king of our society, and six to be counsellors; which king with his six counsellors shall regulate and settle all the concerns of the society, and in particular appoint and affix the court of the ensuing year; they shall also procure, and cause to be procured, all things necessary for the said court, of which they shall keep an exact account. These expences shall be alike both to knights and squires, and a third part more shall fall upon the lords than upon the knights and squires; but the counts shall be subject to a third part more than the lords.

‘ And early on the Tuesday morning (during the period of the court’s sitting) all of us members shall go to the church of the Holy Virgin at Cleves, to pray for the repose of all those of the society who may have died; and there shall each bring his separate offering.

‘ And each of us has mutually pledged his good faith, and solemnly engaged to fulfil faithfully, undeviatingly, and inviolably, all things which are above enumerated, &c.

‘ Done at Cleves, 1381, on the day of St. Cunibert.’

13.—SAINT BRITIUS.

Britius, or Brice, succeeded St. Martin in the bishopric of Tours in the year 399. He died in 444.

17.—SAINT HUGH.

Our saint was a native of Burgundy, or Gratianopolis, and made Bishop of Lincoln by Henry II. In this see he obtained great fame, not only for his extraordinary austerity of life and excellent economy, but for his rebuilding the cathedral from the foundation. Hugh died on this day, in the year 1200, of an ague. In 1220, he was canonized at Rome, and his remains were taken up October 7, 1282, and deposited in a silver shrine.

*17. 1821.—REAR ADM. BURNEY, F.R.S. DIED,
ÆT. 72,

Eldest son of the learned and elegant historian of Music, and brother to two very distinguished persons of the present age, Madame D’Arblay, the justly celebrated novelist; and the late Dr. Charles Burney, a member of that triumvirate of profound scholars which has adorned our own immediate times. Admiral

Burney accompanied Capt. Cook in the two last of his enterprising voyages. He was one of the most scientific and best geographers that this country has produced; of which his laborious, accurate, and voluminous 'History of Voyages of Discovery,' 'Account of the Eastern Navigations of the Russians,' and other works, afford ample proof. The following honourable testimony to the character of Admiral (then Capt.) Burney, is from the pen of Dr. Johnson, who, upon his appointment to the command of the Bristol, in the year 1781, thus writes to Mrs. Thrale:—'I am willing, however, to hear that there is happiness in the world, and delight to think on the pleasure diffused among the Burneys. I question if any ship upon the ocean goes out attended with more good wishes than that which carries the fate of Burney. I love all of that breed whom I can be said to know, and one or two whom I hardly know I love upon credit, and love them because they love each other.'

20.—EDMUND, KING AND MARTYR.

Edmund, King of the East-Angles, having been attacked by the Danes in 870, and unable to resist them, heroically offered to surrender himself a prisoner, provided they would spare his subjects. The Danes, however, having seized him, used their utmost endeavours to induce Edmund to renounce his religion; but, refusing to comply, they first beat him with clubs, then scourged him with whips, and afterwards, binding him to a stake, killed him with their arrows.

22.—SAINT CECILIA.

Cecilia was a Roman lady, who, refusing to renounce her religion, was thrown into a furnace of boiling water, and scalded to death. Others say that she was stifled in a bath, a punishment frequently inflicted, at that time, on female criminals of rank. She suffered martyrdom about the year 225. Cecilia

is regarded as the patroness of music, and is represented by Raffaello with a regal in her hand.

To Music.

Music, high maid, at first, essaying drew
 Rude sketches for the ear, till, with skilled hand,
 She traced the flowing outline, simply grand,
 In varied groups to grace and nature true;
 And this was *Melody*.—Her knowledge grew,
 And, more to finish, as her powers expand,
 Those beauteous draughts, a noble scheme she planned;
 And o'er the whole a glow of colouring threw,
 Evening's rich painting on a pencilled sky,
 Tints that with sweet accord bewitch the sense,
 'Twas *Harmony*: the common crowd, that press
 Around, prefer the charms these hues dispense,
 As they, chance-mingled, on the palate lie,
 To her white forms of undecked loveliness.

Sixty-five Sonnets, &c.

23.—SAINT CLEMENT.

Clement I was born at Rome, and was one of the first bishops of that place: this see he held about sixteen years; from the year 64 or 65 to 81. He was remarkable for having written two Epistles, so excellent, and so highly esteemed, by the primitive Christians, that the first was for some time considered canonical. Clement was sentenced to work in the quarries, and afterwards, having an anchor fastened about his neck, was drowned in the sea.

23.—O. MART.

Old Martinmas-day, an antient quarter-day.

*24. 1820.—THOMAS BROWN, M.D. DIED,

Professor of Moral Philosophy at Edinburgh. He was a celebrated metaphysician, and hardly less distinguished poet; author of the 'Paradise of Coquettes,' a production of particular fancy, elegance, and taste; and of some other poems; the Bower of Spring, Agnes, &c. He published likewise 'Observations on Darwin's Zoonomia,' 8vo.

25.—SAINT CATHERINE.

Our saint was born at Alexandria, and received a liberal education. About the year 305, she was con-

verted to Christianity, which she afterwards professed with the utmost intrepidity, openly reproving the pagans for offering sacrifices to their idols, and upbraiding the Emperor Maxentius, to his face, with the most flagrant acts of tyranny and oppression.

30.—ADVENT SUNDAY.

This and the three subsequent Sundays which precede the grand festival of Christmas take their name from the Latin *advenire*, to come into; or from the word *adventus*, an approach.

30.—SAINT ANDREW.

Andrew was the son of James, a fisherman at Bethsaida, and younger brother of Peter. He was condemned to be crucified on a cross of the form of an X; and, that his death might be more lingering, he was fastened with cords. The *Order of the Thistle* is described in T. T. for 1818, p. 283.—See also T. T. for 1820, p. 280, for some poetry on the subject.

Astronomical Occurrences

In NOVEMBER 1823.

SOLAR PHENOMENA.

THE Sun enters Sagittarius at 45 m. after 1 in the morning of the 23d of this month; and he rises and sets during the same period, as in the following

TABLE

Of the Sun's Rising and Setting for every fifth Day.

September 1st, Sun rises	12 m. after 7.	Sets	48 m. past 4
6th,	20	7	40
11th,	29	7	31
16th,	37	7	23
21st,	44	7	16
26th,	51	7	9

Equation of Time.

The apparent is still before real time, or, in common language, the Sun is before the clocks; and consequently the equation must be subtracted from

the time given by the dial, to obtain the true time. This equation reaches its annual maximum on the 3d of this month, when it is 16 m. 15.9 s.

TABLE

Of the Equation of Time for every fifth Day.

		m.	s.
Saturday Nov.	1st, from the time by the dial <i>subtract</i>	16	14
Thursday	6th,	16	12
Tuesday	11th,	15	50
Sunday	16th,	15	7
Friday,	21st,	14	3
Wednesday	26th,	12	38

LUNAR PHENOMENA.

Phases of the Moon.

New Moon	2d day, at 40 m. after 9 in the evening
First Quarter	10th 52 10 at night
Full Moon	18th 21 10 in the morning
Last Quarter	25th 33 3

Moon's Passage over the Meridian.

Such as wish to observe the Moon's transits for this month will find the following times convenient for that purpose, viz.

November 8th, at 39 m. after 4 in the afternoon
9th, ... 25 5
10th, ... 8 6
11th, ... 51 6
12th, ... 32 7 in the evening
13th, ... 15 8
14th, ... 58 8
15th, ... 45 9
16th, ... 35 10
24th, ... 27 5 in the morning
25th, ... 16 6
26th, ... 4 7
27th, ... 50 7
28th, ... 36 8
29th, ... 24 9

PHENOMENA PLANETARUM.

Phases of Venus.

This planet having experienced her total obscuration during the last month, is now increasing in brightness, but yet appears only as a small crescent, as shown by the following numbers:

Nov. 1st, {	Illuminated part = 1.69406 digits
	{ Dark part..... = 10.40394

Eclipses of Jupiter's Satellites.

There will be eleven eclipses of the 1st and 2d satellites visible this month, and these will take place at the following times; a short time before which the young astronomer should have his telescope fixed, and be ready for the observation. They are given in *mean* time.

Immersion.

First Satellite,	4th day, at 58 m. 20 s. after 1 in the morning
11th	51 . . . 51 3
12th	20 . . . 12 10 at night
18th	45 . . . 16 5 in the morning
20th	13 . . . 38 0
27th	7 . . . 9 2
28th	35 . . . 32 8 at night
Second Satellite, 3d	54 . . . 8 11
11th	30 . . . 45 2 in the morning
18th	7 . . . 29 5
28th	3 . . . 19 9 at night

TABLE
Of the Transits and Meridional Altitudes of the Planets.

	1st	7th	13th	19th	25th
TRANSITS.					
	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
Mercury	10 55 <i>mor.</i>	10 52	10 58	11 6	11 20
Venus	10 5 <i>mor.</i>	9 46	9 31	9 20	9 11
Mars	8 2 <i>mor.</i>	7 51	7 39	7 26	7 13
Jupiter	4 26 <i>mor.</i>	4 2	3 36	3 10	2 43
Saturn	0 58 <i>mor.</i>	0 32	0 6	11 34 <i>night</i>	11 7
G. Sidus	4 17 <i>aft.</i>	3 44	3 27	3 3	2 39
ALTITUDES.					
Mercury	32°27'	30°35'	27°25'	23°57'	20°41'
Venus	32 14	33 8	33 24	33 5	32 19
Mars	49 48	48 58	47 48	46 39	45 30
Jupiter	61 18	61 19	61 21	61 23	61 26
Saturn	54 10	54 2	53 54	53 48	53 41
G. Sidus	14 56	14 57	14 58	14 59	15 0

Other Phenomena.

Venus will be stationary on the 1st of this month, and Mercury will attain his greatest elongation on the 4th. The Moon will be in conjunction with α in Scorpio at 34 m. after 1 in the morning of the

5th; with Georgium Sidus at 32 m. past 3 in the afternoon of the 7th; and with Jupiter, at 27 m. after midnight of the 21st. Saturn will be in opposition at half past one in the afternoon on the 13th. Mercury will be in conjunction with α in Libra on the 18th, when the planet will be $60\frac{1}{2}'$ north of the star. Mercury will also be in conjunction with β in Scorpio on the 30th, the planet being then $61\frac{1}{2}'$ south of the star.

REFLECTIONS ON THE STARRY HEAVENS.

[Continued from page 301.]

GEMINI (Π), *the Twins*,

Is the last of the spring signs, and the third in the zodiacal series. According to the common mode of astronomical computation, the Sun enters this sign on the 21st of May; or the Earth then entering Sagittarius, the Sun appears to make his transit from Taurus to Gemini. A still larger portion of the earth round the north pole is now within the region of perpetual day, than during the Sun's passage through Taurus. The days in the northern hemisphere still continue to increase, as he advances in his progress; and when the Sun enters this sign, he rises at 6 m. after 4, and sets 54 m. past 7; thus making the length of the day 15 h. 48 m., and that of the night 8 h. 12 m.

Various conjectures have been presented respecting the origin of this sign. The Greeks claim it as their sole invention, and the story of Castor and Pollux may have been the production of their imagination; but both the Indian zodiac and an Egyptian fragment of great antiquity show that the Greeks were anticipated by the orientals, and that their Twins was rather a copy than an invention. Gemini was the sign in which the Egyptian *Anubis* had his station. Plutarch explains the signification of this emblematical deity under the form of a dog. He sup-

poses him to be the type of the planet Mercury, which is sometimes a morning and sometimes an evening star. The symbol seems to have been chosen from that animal being supposed to watch day and night, and thus to be a fit guardian of Osiris (the *Sun*), and Isis (the *Moon*). The Grecian allegory of *Castor* and *Pollux* is too well known to need repetition in this place. Some mythologists among the Greeks designate the Twins by the names of *Hercules* and *Apollo*.

Gemini has the *Lynx* on the north, *Cancer* on the east, *Monoceros* and *Canis Minor* on the south, and *Taurus* on the west. It contains 85 stars; two of the 2d magnitude, four of the 3d, and six of the 4th. The principal star is *Castor*, which first appears on the N.N.E. $\frac{1}{4}$ E. point of the compass, at London. Its declination is $32^{\circ} 16' 6''$, right ascension $110^{\circ} 46' 25''$, and meridian altitude $70^{\circ} 45' 6''$. The following are the times of its rising and culminating for the 1st of each month in 1820, according to the *Celestial Atlas*, already referred to: viz.

	Rising.	Culminating.		Rising.	Culminating.
	<i>h. m.</i>	<i>h. m.</i>		<i>h. m.</i>	<i>h. m.</i>
January -	2 55 <i>aft.</i>	0 34	July - - -	3 0 <i>mor.</i>	0 43 <i>aft.</i>
February	0 45 - -	10 23	August - -	0 55 - -	10 35 <i>mor.</i>
March - -	10 55 <i>mor.</i>	8 34	September 11	0 <i>aft.</i>	8 38 - -
April - -	8 55 - -	6 41	October -	9 10 - -	6 52 - -
May - - -	7 0 - -	4 50	November	7 15 - -	4 55 - -
June - -	5 0 - -	2 47	December	5 10 - -	2 50 - -

Passing from the horns of *Taurus* to the east, *Castor* and *Pollux*, the two principal stars in this constellation, are found rather more than an hour's distance from the confines of the milky way. They are situated in the exterior temples of the Twins; α (*Castor*) being the more elevated, and β (*Pollux*) being the lower star. The former is in the eastern angle of a great triangle, formed by it, the pole star and *Capella*, situated north-west of *Castor*, and near the eastern borders of the milky way. *Capella* appears rather nearer to *Castor* than to the pole. This

constellation is also readily found by supposing a right line drawn from Aldebaran, the Bull's eye, through the star in the tip of the lower horn, and it will cross the milky way, and pass between Castor and Pollux, in the heads of the Twins.

In the revolution of the heavens, Castor passes vertically over the Barbary states, Palestine, Persia, Tibet, part of China, and Japan, with Louisiana, the southern extremity of the United States of North America, Bermudas, &c.

CANCER ($\var�$), the Crab.

This is the first of the three summer signs which the Sun enters on the 21st of June; and thus introduces the first day of summer, and the longest in the year, in these northern latitudes. As the Sun continually revolves about the north pole without setting all the time he is on the north side of the equator, the moment he enters Cancer may be considered as the noon of the polar day. On this day, too, he attains his greatest declination, and is vertical to the tropic of Cancer. The circle which separates light and darkness just touches the Arctic circle; so that the whole of the Arctic regions are now completely illuminated during, at least, an entire revolution of the Sun. The parallel of London has now its longest day, which extends from about a quarter before 4 in the morning till a quarter after 8 at night.

This constellation appears to have originated either in Egypt or India, as in both these ancient zodiacs the sign of the Crab is found, though in some of them its place is supplied by a Beetle. Some of the most ancient mythologists placed *Hermanubis* in the place now assigned to the Crab. This was symbolized by a man (*Hermes*) with the head of an Ibis, or hawk. Several of the ancient Egyptian monuments still exhibit traces of this symbolization; and M. *Belzoni* observes, "The entrances to the sepulchres of the Egyptian kings, in the sacred

valley of Beban-el-Malook, are generally surmounted with a bas-relief, representing an oval, in which are sculptured a Scarabæus, or Beetle, and the figure of a man with the head of a hawk. On each side of this emblem are two figures in the act of adoration." The common year of the Egyptians commenced when the Sun was in this sign: the Nile was then approaching its height, and the waters were discoloured and muddy. Two asses were placed as the symbol of ϖ , the Chaldean name of which has been translated *muddiness*. Plutarch says that, in the month Payn, when the Sun was in Cancer, the Egyptians baked cakes, on which was the figure of an ass bound.

The contiguous constellations are the Lynx on the north, Leo on the east, Hydra on the south, and Gemini on the west. The whole number of stars in this sign is 83, but none of them exceeds the 4th magnitude, of which class there are seven: the remaining 76 are all less. α Canceris, near the eastern extremity of the southern great claw, has $12^{\circ} 31' 6''$ of north declination, $132^{\circ} 9' 20''$ of right ascension, and passes the meridian of London at an altitude of $51^{\circ} 0' 6''$. Its rising and culmination for the 1st of each month in 1820, are stated as follows: viz.

	Rising.		Culminating.			Rising.		Culminating.	
	<i>h.</i>	<i>m.</i>	<i>h.</i>	<i>m.</i>		<i>h.</i>	<i>m.</i>	<i>h.</i>	<i>m.</i>
January -	7	14	aft.	2	0	mor.	7	0	mor.
February	4	50	- -	11	50	aft.	5	0	- -
March - -	3	10	- -	10	10	- -	3	5	- -
April - -	1	15	- -	8	15	- -	1	15	- -
May - -	11	20	mor.	6	30	- -	11	25	aft.
June - -	9	7	- -	4	15	- -	9	20	- -
July - -	-	-	-	-	-	-	7	0	mor.
August - -	-	-	-	-	-	-	5	0	- -
September -	-	-	-	-	-	-	3	5	- -
October - -	-	-	-	-	-	-	1	15	- -
November -	-	-	-	-	-	-	11	25	aft.
December -	-	-	-	-	-	-	9	20	- -

This sign may be distinguished in the heavens by supposing a line drawn through the two stars, Castor and Pollux, and it will cut the ecliptic in the western part of the body of the Crab, eastwards of which a line of five or six small stars is seen extending across the sign, in the direction of the ecliptic, till they are terminated by three stars, forming a small triangle,

near the northern extremity of the southern great claw, with its longest side upwards. In the upper part of the sign there are also eight stars, forming a kind of L, with its opening to the north-east.

[To be continued.]

The Naturalist's Diary

For NOVEMBER 1823.

The earth mourneth and languisheth; Lebanon is ashamed and withereth away; Sharon is like a wilderness; and Bashan and Carmel shake off their fruits.—ISAIAH xxxiii, 9.

THE footsteps of contemplation are now found amid the ruins of the year, and we surrender ourselves most readily to the quietudes of a serious thoughtfulness—and deep and interesting impressions are borne home upon the heart—in every breath that soothes, in every beam that gilds, and in every variety of colouring that adorns the landscape. But soon, too soon, shall we be compelled to exclaim with the poet, in reference to this, generally speaking, gloomy month,—

That time of year thou may'st in me behold,
When yellow leaves, or none, or few do hang
On those wild boughs which shake against the cold,
Bare, ruined quires where late the sweet birds sang.

November, however, has its bright as well as its dark side. It is now (observes a pleasing writer, before quoted (that the *Labourer* is about to enjoy a temporary mitigation of the season's toil. His little store of winter provision having been hardly earned and safely lodged, his countenance brightens, and his heart warms, with the anticipation of winter comforts. As the day shortens, and the hours of darkness increase, the domestic affections are awakened anew by a closer and more lengthened converse; the father is now once more in the midst of his family; the child is now once more on the knee of its parent; and she, in whose

R e 2

comfort his heart is principally interested, is again permitted, by the privileges of the season, to increase and to participate his happiness. It is now that the *Husbandman* is repaid for his former risk and anxiety—that, having waited patiently for the former and the latter rain, he builds up his sheaves, loads his waggons, and replenishes his barns.

It is now that *Men of study and literary pursuit* are admonished of the season best suited for the acquisition of knowledge. Learning is now opening her gates, and Night is fast advancing her claims to the renewed labours of the student, to those evening hours of watching, and reflection, and investigation, which will so amply repay the trouble.

The congregating of small birds, which was noticed as commencing in the last month, still continues. The long-tailed titmouse (*parus caudatus*) is now seen in troops in the tall hedge-rows. We have no bird more remarkable for its family association than this; he is never seen alone, but continues with his offspring, which is a very numerous one, from the time of hatching, till the final separation in spring. They seem the most restless of little creatures, and are all the day long in a state of progression from one field to another, flitting through the air like balls of feathers with long projecting tails, or threading the branches of a tree, or bushes of a hedge, following each other in a little stream: the leading bird utters a shrill call (*twit, twit, twit*), and away they all scuttle in a hurry to be first, stop for a second, and then are off again, observing the same order and precipitation during the whole day. The space traversed by these little animals in the course of their progresses, from their first moving until roosting time, must be considerable; yet, small as they are, they appear by their constant animation and alacrity to be fully equal to the performance of this daily occupation. Their food is insects, which they find under the lichens and mosses, surrounding

the branches of trees and shrubs, and the smallest cannot escape them, as there is no British bird that has so diminutive a bill. The golden-crested wren, though a smaller bird, has a much longer mandible than the *parus caudatus*. Their nest is as singular in its construction as the bird is in its habits; it is made of a considerable size, to contain a numerous family, shaped somewhat like a bag, externally formed of herbaceous lichens, collected from the blackthorn and the maple, and lined with such a profusion of feathers, that the young ones appear almost smothered in a feather bed.—(See our last volume, p. 289.)

The foggy mornings of November are favourable to the growth and appearance of *mushrooms*; and to range the reeking meadows in search of them, at an early hour in the morning, is the occupation of many of the village children. The *fungi* or mushroom tribe are very numerous, and of singular construction¹.

A successful attempt to facilitate the study of the *British fungi* has lately been made by Mr. PURTON, in his very interesting *Supplement* to the MIDLAND FLORA, which has been noticed at p. 183 of the present volume. In this Appendix the *fungi* are particularly numerous, and are illustrated with peculiar accuracy and scientific skill; and there are twenty-two beautifully coloured plates, well executed, of many new and rare species.

The Virginia-planter (*hedera quinque-folia*) has now a very rich and beautiful appearance.

The stock-dove (*columba ænas*), one of the latest winter birds of passage, arrives from more northern regions, towards the end of this month. *Moles* now make their nests, in which they lodge during the winter, and which are ready for depositing their young in the spring.

¹ See T. T. for 1820, p. 36; 1821, pp. 261, 282; 1822, p. 290; and p. 302 of the present volume.

The *woodman* repairs to the woodlands to fell coppices, underwood, and timber.

The farmer usually finishes his ploughing this month. Cattle and horses are taken into the farm-yard; sheep are sent to the turnip-field; ant-hills are destroyed; and bees are put under shelter. The gardener sows peas and beans in a warm situation for an early crop, if happily they may survive the frosts of winter.

Violent storms of wind may generally be expected in November.

'Tis night; the loud wind through the forest wakes,
With sound like ocean's roaring, wild and deep,
And in yon gloomy pines strange music makes,
Like symphonies unearthly, heard in sleep;
The sobbing waters dash their waves, and weep;
Where moans the blast its dreary path along,
The bending firs a mournful cadence keep;
And mountain rocks re-echo to the song,
As fitful raves the storm the hills and woods among.

Yamoyden.

Such is the picture of a wild, autumnal night in America, by a native poet—and which is well adapted to the northern and mountainous parts of England. How often, alas! in this dreary, chilling month, do we picture to ourselves while comfortably housed and warmed, and bidding defiance to the pelting of the storm, the havock of the ocean-tempest:—

Fancy amid the storm then takes her seat,
Where big, tumultuous billows beat
Around the dreary, howling cave,
When no *life-boat* the crew can save;
While deaf'ning winds and foamy surge
On shelving rocks the vessel urge,
There sees the sailor climb the mast,
A look of anguish round him cast—
And quit his grasp, and fall.

REV. J. BLACK.

But, let us turn from such soul-harrowing scenes, too often witnessed by our fashionable visitants to the rock-encircled coast of Albion, to those of a milder, more pleasing character; to an *English home*,

with all its endearing attractions. And we think we cannot better conclude this month's lucubrations than with some beautiful lines transmitted to us by our kind Glocestrian correspondent, whose valuable communications we shall be always proud to receive, and, we trust, ever gratefully acknowledge.

The following poem has never yet met the public eye, and has been read only in that domestic circle which it so exquisitely describes:—

DOMESTIC HAPPINESS:—Addressed to a Lady.

'Tis not for you, whose golden-winged hours
In joys half-tasted ever are employed,
Who seek gay pleasure in her sweetest bowers,
And still untasted leave her half enjoyed :

'Tis not for you who dread the painful thought,
Who laugh thro' life so negligently gay,
Whose bliss, however mean, is dearly bought,
'Tis not for you I tune this simple lay.

The Muses' joy more pure, tho' more confined,
Those prospects heighten which ye strive to miss;
She seeks at *home* for pleasures more refined,
That *HOME* ye hate comprises all her bliss.

She seeks not vainly thro' the lengthened night,
Midst the gay haunts of indolence and pride,
Resplendent scenes, that pall whilst they invite,
With wand'ring dissipation for her guide.

She will not follow ev'ry transient glance
Of vagrant folly, ever on the wing;
She cannot mingle in the frolic dance,
Or list to hear the trifling syren sing.

She sees thro' all the laboured pomp of art
The mask of pleasure hides the face of woe;
She spurns such joys as spring not from the heart,
And pines for bliss they have not to bestow.

Pensive, she turns the eye from folly's train,
And sighs to see the heedless mortals stray,
To seek for happiness, and seek in vain,
Where, if she deigns to call, she cannot stay.

The friendly Muse to you, ye thinking few,
Shall lend her aid to sweeten ev'ry hour,
Shall open richer prospects to your view,
And guide you *HOMEWARD* to her social bow'r.

On HOME, thou only seat of ev'ry joy
 The heart can relish or the judgment taste,
 Estranged from thee, the soul finds no employ,
 Nor feels the present, nor enjoys the past.

Oh, let me seek thee with thy calm delights,
 The look of welcome, and the friendly kiss,
 Thy peaceful mornings, and thy cheerful nights,
 With all a husband's, all a father's bliss.

How sweet to pour thy sorrows to a heart,
 That feels, yet strives to check the rising sigh!
 How sweet thy better prospects to impart,
 And kiss the tear of transport from her eye!

How sweet the task to trace with glad surprise
 The young idea, shooting unconfined,
 With fostering care to cherish, as they rise,
 The seeds of virtue in the infant mind;

To bend the pliant soul to wisdom's lore,
 Firm honour's steady precepts to infuse,
 The favourite bent of genius to explore,
 And guide luxuriant fancy to its use!

The sullen apathy, the cloistered pride,
 That deems those heart-felt joys beneath the care;
 The candid muse will pity, not deride,
 But welcome home the bliss they cannot share.

Let me with rapture view those pleasing cares
 Which fright the boasted sons of liberty;
 The heart that no domestic fondness shares,
 Foregoes its dearest blessings to be free.

Is freedom, then, but room to wander wide,
 And hardly snatch at pleasures ere they're past,
 To seek for ever for some path untried,
 And find it cold and cheerless as the last?

The solitary bark of winds the sport
 Which thro' the vast Atlantic winds its way,
 Without a haven or a destined port,
 Feels this sad liberty, as well as they.

Is bondage, then, to wear those silken bands
 Uniting hearts that cannot wish to rove?
 To grant that care the infant smile demands,
 And pays with sweet returns of filial love?

How painful to a sympathizing mind
 To stray this life unseeking, and unsought,
 One cheerless, barren wilderness to find,
 Without an object worth a second thought!

Wilt thou (for well thou canst) supply
 The tender cares of mother and of wife,
 And, tutored by divine philanthropy,
 Fill the sweet duties of domestic life?
 And wilt thou turn to lend a patient ear,
 When suff'ring merit makes its sorrows known?
 And shall thy hand wipe off the orphan's tear,
 And, lending others bliss, secure thine own?
 Thus shall contentment bless our humble seat,
 And ev'ry gliding year new comforts raise;
 So shall calm conscience make our slumbers sweet,
 Whilst, tho' obscure, not useless pass our days.
 Oh, hapless they, of these mild joys debarred!
 For them, time ling'ring plies with heavy wings:
 'Tis sad experience speaks, and trust the bard
 Whose heart but feels too strongly what he sings.

DECEMBER.

Remarkable Days

In DECEMBER 1823.

*5. 1821.—JAMES PERRY DIED, *ÆT.* 65,

For many years Editor and Proprietor of the 'Morning Chronicle.' To Mr. Perry belongs the honour of having raised the character of the daily press in respectability, giving to it an influence it did not before possess. He also considerably improved the whole system and routine of newspapers, rendering them a much more prompt channel of intelligence than formerly. Independently of his immediate professional studies, he possessed a general taste for elegant literature, of which there is sufficient proof in a very extensive and valuable collection of books which he had formed, and which have, since his death, been disposed of by public auction.

6.—SAINT NICHOLAS.

Nicholas was Bishop of Myra, in Lycia, and died about the year 392. He was of so charitable a disposition, that he portioned three young women, who

were reduced in circumstances, by secretly conveying a sum of money into their father's house. The annual ceremony of the *boy-bishop*, once observed on this day, is described at length in T. T. for 1814, p. 306.

8.—CONCEPTION OF THE VIRGIN MARY.

This festival was instituted by Anselm, Archbishop of Canterbury, because William the Conqueror's fleet, being in a storm, afterwards came safe to shore. The council of Oxford, however, held in 1222, permitted every one to use his discretion in keeping it.

13.—SAINT LUCY.

This virgin martyr was born at Syracuse. She refused to marry a young man who paid his addresses to her, because she had determined to devote herself to religion, and, to prevent his importunities, gave her whole fortune to the poor. The youth, enraged at this denial, accused her before Paschasius, the heathen judge, of professing Christianity; and Lucy, after much cruel treatment, fell a martyr to his revenge, in the year 305.

16.—O SAPIENTIA.

This is the beginning of an anthem in the Latin service to the honour of Christ's advent, which used to be sung in the church from this day until Christmas eve.

21.—SAINT THOMAS THE APOSTLE.

Thomas, surnamed *Didymus*, or the Twin, was a Jew, and in all probability a *Galilean*. There are but few passages in the gospel concerning him. Thomas is said to have suffered martyrdom in the same city, being killed by the lances of some people instigated by the Bramins.

This is the *shortest* day, and is, at London, 7 h. 44 m. 17 s.; allowing 9 m. 5 s. for refraction.

On a STATUE of TIME,

Translated from the Greek.

The maker whence?—from Sicyon—what's his name?

Lysippus—who art thou? all-conquering TIME,—

Why on thy tiptoe raised?—I always run.

Thy feet are winged!—My speed is like the wind.

Why in thy hand a razor?—I inflict wounds sharper than a sword.

A bushy lock upon thy forehead waves?—That they who meet may seize me.

Behind, thy head is bald!—In vain would he who lets me pass, recal or stay me!

25.—CHRISTMAS DAY.

This is named *Christmas-day*, from the Latin *Christi Missa*, the Mass of Christ, and thence the Roman Catholic Liturgy is termed their *Missal* or *Mass Book*. About the year 500, the observation of this day became general in the Catholic church.

At this once hospitable season, there was 'a run of merry days' from Christmas-eve to Candlemas, and the first twelve in particular were full of triumph, and innocent pleasure. But '*every thing is altered*' now. The celebration of Christmas, in modern times, is scarcely worth a record. The middle classes make it a sorry business of a pudding or so extra, and a game at cards. The *rich* invite *their rich friends* to their country houses:—but the *poor* are left out entirely, or presented with a few clothes and eatables that make up a wretched substitute for the hospitable intercourse of old. To those who have the power (would that they had the *heart*!) to do it, we would say, Every face that you contribute to set sparkling at Christmas is a reflection of that goodness of nature which generosity helps to uncloud, as the windows reflect the lustre of the sunny heavens. Every *holly bough* and *lump of berries* with which you adorn your houses, is a piece of *natural piety* as well as beauty, and will enable you to relish the green world of which you show yourselves not forgetful. Every *wassail bowl* which you set flowing without drunkenness, every harmless pleasure, every innocent mirth however mirthful, every forgetfulness even of serious things, when they are only swallowed up in the kindness and joy which it is the end of wisdom to produce, is

Wiseest, virtuousest, discreetest, best.

F f

The divine MILTON, though a stern reformer, saw nothing to quarrel with in the natural joys of humanity, or in the customs which they gave rise to. In a Latin epistle to his friend Deodati, he countenances all the merriments of Christmas. He is recorded as having kept 'gaudy days' (holidays) himself; and in his affectionate elegy on the death of the same friend, does not disdain to regret the pleasure they used to have in roasting pears and chesnuts during the long winter evenings, while the wind was thundering through the elm-trees out of doors¹.

Many of the amusing Christmas ceremonies of 'olden tyme' in England are described in our previous volumes.—Mr. WHISTLECRAFT affords us a delightful picture of the substantial entertainments given in the days of good King ARTHUR, which is delineated with all the minute accuracy and high finishing of a *Mieris* or a *Gerard Douw*.

The great King Arthur made a sumptuous feast,
And held his Royal Christmas at Carlisle,
And thither came the vassals, most and least,
From every corner of this British Isle;
And all were entertained, both man and beast,
According to their rank, in proper style;
The steeds were fed and littered in the stable,
The ladies and the knights sat down to table.

The bill of fare (as you may well suppose)
Was suited to those plentiful old times,
Before our modern luxuries arose,
With truffles and ragouts, and various crimes;
And therefore, from the original in prose
I shall arrange the catalogue in rhymes:
They served up salmon, venison, and wild boars
By hundreds, and by dozens, and by scores.
Hogsheads of honey, kilderkins of mustard,
Muttons, and fatted beeves, and bacon swine;
Heron and bitterns, peacock, swan and bustard,
Teal, mallard, pigeons, widgeons, and in fine
Plum-puddings, pancakes, apple-pies and custard:
And therewithal they drank good Gascon wine,

¹ See that pleasant little *year-volume*, yclept *Literary Pocket Book*, the blank pages of which might be made a convenient receptacle of observations, hints, and notes for T. T. for 1824.

With mead, and ale, and cyder of our own;
For porter, punch, and negus, were not known.

The noise and uproar of the scullery tribe,
All pilfering and scrambling in their calling,
Was past all powers of language to describe—
* * *

All sorts of people there were seen together,
All sorts of characters, all sorts of dresses;
The fool with fox's tail and peacock's feather,
Pilgrims, and penitents, and grave burgesses;
The country people with their coats of leather,
Vintners and victuallers with cans and messes;
Grooms, archers, varlets, falconers and yeomen,
Damsels and waiting-maids, and waiting-women.

The Christmas ceremonies at *Naples* are described at some length in our last volume, pp. 303-305. To this account may now be added the following custom on the *day preceding* Christmas-day. The city then makes a present to the king of fruit and birds; this offering, which consists of every fruit that the country produces, and of every bird which supplies the table, is arranged on several pyramids, and carried in procession down the principal street to the palace. The fruits are the most excellent of the kind, and the quantity is generally enormous.

26.—SAINT STEPHEN.

Stephen was the first deacon chosen by the apostles. He was cited before the Sanhedrin, or Jewish Council, for prophesying the fall of the Jewish Temple and economy; and while vindicating his doctrine by several passages of the Old Testament, he was violently carried out of the city, and stoned to death, in the year 33.

27.—JOHN EVANGELIST.—See p. 163.

28.—INNOCENTS.

The slaughter of the Jewish children, by Herod, is commemorated on this day. The festival is very antient, for Tertullian and Saint Cyprian call these Innocents martyrs, and Prudentius has written a hymn upon the subject. *Childermas*-day is another name for this feast.

Days of my childhood, when, where wild-flowers grew,
 From morn I've strayed till twilight gloomed again,
 When I recal my long since pleasures, then
 So sweet, so pure, so simple, and so true,
 Mine eyes grow misty with regretful dew,
 To think that like a dream they're gone;—I yearn
 And sigh for bliss that never can return,—
 So loved when lost—and so unprized when new!
 And well may I weep o'er the joys that smiled
 Long past—well linger 'mid the times that were,
 I who retain the weakness of the child
 Without the simpleness;—my moments are
 As wayward, and as wasteful, and as wild,
 —But, oh! not innocent, nor void of care.

Sixty-five Sonnets, &c.

31.—SAINT SILVESTER.

He was Bishop of Rome; and succeeded *Miltiades* in the papacy, in 314. *Silvester* is accounted the author of several rites and ceremonies of the Romish church, as asylums, unctions, palls, corporals, mitres, &c. He died in 334.

*31. 1821.—CLOSE OF A MEMORABLE YEAR.

The year 1821 was as remarkable for *winds and rains* as for the *bounties of Providence* in blessing us with *plenty*, and giving long withheld comfort to the poor, which *TIME* should record for the children of the generations to come. This is best shown by stating the price of articles, at the same place, at two periods.

1813.

	s.	d.
Meat (Beef, Mutton, Pork)	0	10 per lb.
Bread (Household).....	1	3½
Ditto (White).....	1	5½
Malt	15	0 per bushel
Hops	4	6 per lb.
Sugar (Brown).....	0	10½
Ditto (Loaf).....	1	3
Mould Candles	1	1½
Dip ditto	1	0½
Soap (Household).....	0	11½
Butter	1	3
Bacon	1	3
potatoes (sack of 3 bushels)	18	0

1821.

	s.	d.
0	4	to 5d. lb.
0	7½	
0	8½	
9	0	per bushel
0	11	per lb.
0	8	
0	11	
0	10½	
0	8½	
0	6½	
0	10½	
0	5½	to 6d.
3	3	

Astronomical Occurrences

IN DECEMBER 1833.

SOLAR PHENOMENA.

THE Sun enters Capricornus at 14 m. past 2 in the afternoon of the 22d of this month; when

WINTER comes to rule the year,
Sullen and sad, with all his rising train;
Vapours, clouds and storms.

Now, when the cheerless empire of the sky
To *Capricorn* the *Centaur Archer* yields,
And fierce *Aquarius* stains th' inverted year;
Hung o'er the farthest verge of Heaven, the Sun
Scarce spreads through ether the dejected day.
Faint are his gleams, and ineffectual shoot
His struggling rays, in horizontal lines,
Thro' the thick air, as clothed in cloudy storm,
Weak, wan, and broad, he skirts the southern sky;
And, soon descending, the long dark night,
Wide shading all, the prostrate world resigns.

THOMSON.

The Sun also rises and sets on the following days during this month as below.

TABLE

Of the Sun's Rising and Setting for every fifth Day.

December 1st, Sun rises 57 m. after 7.	Sets 3 m. after 4
6th, 1 8	59 3
11th, 5 8	55 3
16th, 7 8	53 3
21st, 8 8	52 3
26th, 7 8	53 3
31st, 5 8	55 3

Equation of Time.

If the quantities in the first five lines of the following table be subtracted from the time as given by a good Sun-dial, or those in the other two lines be added to these times, the results will be the mean times for the respective epochs.

F f 2

TABLE
Of the Equation of Time for every fifth Day.

Monday, Dec. 1st, from the time by the dial subtract	^{m.} 10 ^{s.} 55
Saturday, 6th,	8 55
Thursday, ... 11th,	6 42
Tuesday, 16th,	4 19
Sunday, 21st,	1 51
Friday, 26th, to the time by the dial add	0 38
Wednesday, ... 31st,	3 6

LUNAR PHENOMENA.

Phases of the Moon.

New Moon, 2d day, at 36 m. past 1 in the afternoon	
First Quarter, 10th 56 6 in the evening	
Full Moon, 17th 50 9	
Last Quarter, 24th 18 1 in the afternoon.	

Moon's Passage over the Meridian.

The following passages of the Moon over the first meridian during this month have been selected as affording good opportunities for observation, should the weather prove favourable :

December 8th, at 38 m. after 4 in the evening	
9th, ... 19 5	
10th, ... 0 6	
11th, ... 41 6	
12th, ... 25 7	
13th, ... 12 8	
14th, ... 3 9 at night	
15th, ... 0 10	
16th, ... 1 11	
25th, ... 22 6 in the morning	
26th, ... 9 7	
27th, ... 57 7	
28th, ... 46 8	
29th, ... 37 9	

PHENOMENA PLANETARUM.

Phases of Venus.

December 1st, {	Illuminated part = 4.57386 digits
	Dark part = 7.42614

Eclipses of Jupiter's Satellites.

These eclipses are very numerous this month, and among those of the first and second satellites the following will be visible, viz.

Immersion.

First Satellite,	4th day, at 0 m. 20 s. after 4 in the morning
5th,	29 . 10 10 at night
11th	54 . 29 5 morning
13th	22 . 53 midnight
14th	51 . 23 6 evening
20th	16 . 47 2 morning
21st	45 . 17 8 evening
27th	10 . 46 4 morning
28th	39 . 18 10 night
Second Satellite,	5th 40 . 16 11 . .
13th	17 . 20 2 morning
20th	54 . 28 4
23d	12 . 32 6 evening

Emersions.

First Satellite 30th, at 19 m. 45 s. after 7 in the evening
 Second Satellite 30th, - 34 m. 33 s. . . . 11 at night

Form of Saturn's Ring.

This still shows a considerable opening, and its telescopic appearance is a pleasing spectacle; for

December 1st, { Transverse axis 1.000
 Conjugate axis — 0.426

TABLE

Of the Transits and Meridional Altitudes of the Planets.

	1st	7th	13th	19th	25th
TRANSITS.					
	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
Mercury	11 32 <i>mor.</i>	11 46	0 2 <i>aft.</i>	0 15	0 31
Venus	9 2 <i>mor.</i>	8 57	8 52	8 49	8 45
Mars	6 58 <i>mor.</i>	6 43	6 29	6 11	5 54
Jupiter	2 16 <i>mor.</i>	1 47	1 17	0 48	0 18
Saturn	10 40 <i>night</i>	10 12	9 44	9 16	8 48
G. Sidus	2 15 <i>aft.</i>	1 50	1 26	1 0	0 35
ALTITUDES.					
Mercury	17° 52'	15° 37'	14° 4'	13° 16'	13° 20'
Venus	31 11	29 46	28 11	26 29	24 46
Mars	44 23	43 18	42 16	41 17	40 20
Jupiter	61 29	61 32	61 36	61 39	61 43
Saturn	53 37	53 31	53 26	53 21	53 18
G. Sidus	15 2	15 4	15 6	15 8	15 9

Other Phenomena.

The Moon will be in conjunction with α in Scorpio at 6 m. after 9 in the morning of the 2d; with Georgium Sidus, at 43 m. after 1 in the morning

of the 5th; with Jupiter, at 14 m. past 5 in the afternoon of the 18th; and again with α in Scorpio, at 12 m. after 3 in the afternoon of the 29th. Mercury will be in his superior conjunction at 30 m. after 9 in the morning of the 13th. Venus will attain her greatest elongation on the 19th. Mars will be in quadrature at 45 m. after 5 in the evening of the 21st; and Jupiter will be in opposition at a quarter after 12 at noon, on the 28th of this month.

Thus have we traced the revolving seasons to their close, followed the heavenly bodies in their motions, and marked the most striking phenomena which they exhibit. Can the contemplative mind consider these things, and reflect upon that wonderful precision in all the heavenly motions which enables us to calculate the commencement, duration, and end of the phenomena, even to a second, without being led

————— Through Nature up to NATURE's God?

Little is that mind to be envied, that can contemplate all these celestial wonders with stoical apathy; and we delight to call the ardour of our youthful readers to these magnificent subjects of wonder and admiration, that they may, with all the enthusiasm of the poet, exclaim:—

With what an awful world-revolving pow'r
Were first th' unwieldy Planets launched along
Th' inimitable void ! There to remain
Amidst the flux of many thousand years,
That oft have swept the toiling race of men,
And all their laboured monuments away.
Firm, unremitting, matchless in their course;
To the kind-tempered change of night and day,
And of the seasons ever stealing round,
Minutely faithful. Such th' all-perfect Hand,
That poised, impels, and rules the steady whole.

THOMPSON.

REFLECTIONS ON THE STARRY HEAVENS.

[Concluded from p. 329.]

LEO (Ω), *the Lion*.

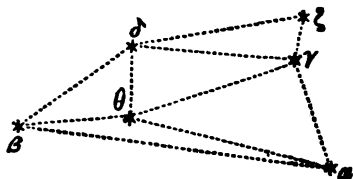
Leo is the second of the summer signs, and the fifth in the order of the zodiac. The Earth is now in Aquarius, and the terminator begins again to approach the north pole, and to contract the limits of constant day in the arctic regions. The days and nights also approximate nearer to an equality in their duration. As the Lion is remarkable for his fierceness and strength, popular tradition represents him as having been chosen as a fit emblem of the Sun's heat at this season of the year. Then the Lion was supposed to be obliged to quit the Lybian desert through thirst, and repair to the banks of the Nile to partake of its cooling stream; the Egyptians are, therefore, said to have adopted this animal as the symbol most emblematical of the Sun, when his heat is the most oppressive. The fabulous representations of the Greeks affirm, that the sign of the Lion was intended to commemorate the Neumean Lion, which was killed by Hercules. There can, however, be no doubt that it was adopted by the oriental nations long anterior to that era. The Sun in *Leo* was worshipped by the Egyptians as the King Osiris, which, according to Herodotus, was the same with Bacchus. For a curious disquisition on the Egyptian origin and import of this sign, we must refer the interested reader to page 40 of the *Celestial Atlas*, already mentioned.

Leo has for his contiguous constellations, *Leo Minor* on the north, *Virgo* on the east, *Sextans* on the south, and *Cancer* on the west. The whole number of stars within its limits is 95; including two of the 1st magnitude, two of the 2d, six of the 3d, and thirteen of the 4th. The principal star is α *Regulus*, which is situated on the ecliptic, and is often called *Cor Leonis*, 'the Lion's Heart.' The other star of

the 1st magnitude is β *Denebola*, which is found in the bushy part of the Lion's tail. *Regulus* has a declination of $12^{\circ} 56' 6''$ and a right ascension of $149^{\circ} 25' 29''$. This star rises at London on the E. N. E. point of the compass, and *Denebola* about 4° further north, and nearly an hour and a half after *Regulus*. The meridian altitude of *Regulus* at London is $51^{\circ} 25' 26''$, and his rising and culmination for the 1st of each month, in 1820, were as below, viz.

	<i>Rising.</i>		<i>Culminating.</i>				<i>Rising.</i>		<i>Culminating.</i>				
	<i>h.</i>	<i>m.</i>		<i>h. m.</i>			<i>h. m.</i>		<i>h. m.</i>				
January -	10	15	<i>aft.</i>	3	10	<i>mor.</i>	July - - -	8	12	<i>mor.</i>	3	19	<i>aft.</i>
February	6	0	- -	1	0	- -	August - - -	6	0	- -	1	14	- -
March - -	4	10	- -	10	9	<i>aft.</i>	September -	4	0	- -	11	15	<i>mor.</i>
April - -	2	15	- -	9	16	- -	October - -	2	15	- -	9	27	- -
May - - -	0	20	- -	7	25	- -	November -	0	22	- -	7	30	- -
June - - -	10	8	<i>mor.</i>	5	23	- -	December -	10	22	<i>aft.</i>	5	27	- -

The sign of Leo is chiefly on the north side of the ecliptic, his fore legs projecting below that circle, and his hind feet resting upon the equator. In the revolution of the heavens, he therefore passes vertically over all the northern parts of the torrid zone. This position may be easily found in the heavens; for a line drawn from the pole, through γ in the Great Bear, will pass through *Denebola*. This star forms a triangle with two others, the one upon the rump, and the other in the upper part of the thigh, as in the following figure:



These last constitute a species of trapezium with *Regulus* and a star marked γ in the Lion's mane; while with γ and ζ nearer the head they constitute almost a rectangle. If, also, we join *Regulus*, *Dene-*

bola, and α Dubhe in Ursa Major, we shall form a large equilateral triangle, the base of which is in the Lion and its vertex in the Bear. If α , β , δ , and γ , be joined, they form a large quadrilateral embracing the greater part of the body of the Lion, and containing the star θ , in the thick part of the thigh, within it. Another small quadrilateral is also formed of four stars of the 4th magnitude, which are situated in the Lion's head north-west of this figure.—Regulus presents a fixed point for determining the ecliptic, and is 3° west of the beginning of the sign Virgo.

VIRGO (μ), the Virgin.

The Virgin is the last of the summer signs, and the sixth in the order of the zodiac, into which the Sun enters on the 23d of August. This is considered as the harvest sign, and the usual symbol by which it is represented is a damsel, whom the popular mythology of the Greeks represented as *Ceres*, with a bunch of corn in her hand. The same ingenious people also feigned the emblem of this sign to be *Astræa*, the Goddess of Justice; and some of their poets affirmed her to be *Erigone*, the daughter of *Icarius*. There seems, however, reason to suppose that the original of this symbol was the Egyptian *Isis*. 'In the Zodiac of Dendera,' says Mr. Jamieson, 'Virgo is represented with a branch of a palm tree in her hand; and trees, branches of trees, or groves, were symbolical of the heavenly hosts. In the Egyptian Zodiac, *Isis*, whose place was supplied by Virgo, was also represented with three ears of corn in her hand. The Chinese call the Zodiac *the Yellow Road*, as resembling a path over which the ripened ears of corn are scattered; and, according to the Egyptian mythology, *Isis* was said to have dropped a sheaf of corn as she fled from *Typhon*, who scattered it over the heavens as he continued to pursue her. Very antiently, indeed, it is said, the signs of the zodiac were compared with corn bound in

sheaves.' The same writer enters into a disquisition of some length relative to the origin and import of this sign, and the inferences that are to be drawn from them in reference to the antiquity of astronomy. He has also endeavoured 'to embalm the memory of the Princess Charlotte in the symbol of the sixth sign of the heavens.'

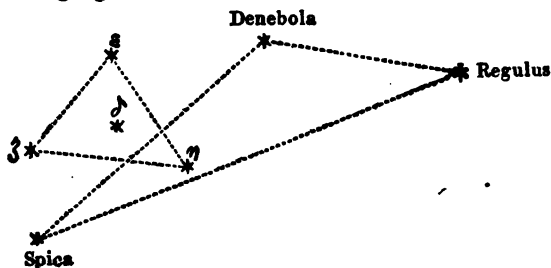
The sign of Virgo is bounded on the east and west by those of Libra and Leo, and on the north and south by some of inferior order. It contains 110 stars; one of which is of the 1st magnitude, six of the 3d, and ten of the 4th. The most brilliant of these is *Spica Virginis*, which is situated in the bunch of corn which Virgo holds in her hand, and is near the ecliptic; having $198^{\circ} 45'$ of right ascension, and $10^{\circ} 13' 42''$ of south declination. It is also one of the nine stars from which the distance of the Moon is calculated for every 3 hours, and given in the Nautical Almanack, for the use of navigators. *Spica* rises at London on the E.S.E. $\frac{1}{2}$ E. point of the horizon, and passes the meridian with an altitude of $28^{\circ} 15' 18''$.

The times of its rising and culminating are given in the following list.

Rising.		Culminating.		Rising.		Culminating.	
	<i>h. m.</i>		<i>h. m.</i>		<i>h. m.</i>		<i>h. m.</i>
January -	1 50 <i>mor.</i>	6 16 <i>mor.</i>	}	July - - -	1 35 <i>aft.</i>	6 35 <i>aft.</i>	
February	11 15 <i>aft.</i>	4 14 - -		August - -	11 30 <i>mor.</i>	4 31 - -	
March - -	9 30 - -	2 25 - -	}	September	9 30 - -	2 35 - -	
April - -	7 35 - -	0 32 - -		October - -	7 32 - -	0 47 - -	
May - - -	5 46 - -	10 41 <i>aft.</i>	}	November	5 40 - -	10 47 <i>mor.</i>	
June - -	3 35 - -	8 39 - -		December	3 30 - -	8 43 - -	

Virgo is most readily distinguished in the heavens by *Spica*, which forms a large equilateral triangle with *Denebola* in Leo, and *Arcturus* in Bootes, which is situated north of Virgo. By joining η in the left shoulder (and which is situated on the equator very near the equinoxial point) with *Vindemiatrix*, or ϵ , on the front of the right arm, and both these with ζ , a little above the right knee, we shall form nearly an equilateral triangle, having δ (in the

front of the Virgin) in its centre, as shown in the following figure.



Again, Spica, Denebola, and Regulus in Leo form the three angles of a very obtuse triangle; of which Spica forms the eastern and Regulus the western angle. The longest side, or that which joins Spica and Regulus, faces the south-west, and is at least double the distance between Regulus and Denebola.

The Naturalist's Diary

For DECEMBER 1823.

Farewel to Autumn, and her yellow bowers,
 Her waning skies and fields of fallow hue;
 Farewel, ye perishing and perished flowers,
 Ye shall revive when vernal skies are blue.
 But now the tempest cloud of WINTER lowers,
 Frosts are severe, and snow-flakes not a few;
 Lifting their leafless boughs against the breeze,
 Forlorn appear the melancholy trees.

At this season of darkness and desolation, however, the Sun daily gives forth a cheering influence, and we are enabled to procure and participate many social and domestic comforts. But if we direct our view to less favoured climes, we cannot easily conceive in what sense comfort or convenience can be attainable, where the ordinary succession of day and night, of light and darkness, are denied. To those, again, who are situated in a different extreme, who live under perpetual sunshine,

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and amidst the undecaying spring of a southern climate—to whom ‘ice, and snow, and hoar frost,’ are unknown; who, amidst undying vegetation and verdure, imagine to themselves our winter scenery—our naked and leafless forests—our variable and inclement atmosphere—‘*our ice in morsels, our snow as wool*’;—to persons under these circumstances, our cold and ungenial latitudes must, on the other hand, appear comfortless and revolting:—and yet, certain it is, that no known climate under heaven is totally destitute of the means of supporting, and supplying comfort to man. It is only in the apprehension of ignorance and inexperience, that his condition, however remotely or approximately situated with regard to the Sun, appears wholly miserable; for, while the inferior animals degenerate or perish under a protracted or distant removal from their native climate and soil, man alone is found; and is, by an arrangement of Divine Wisdom, fitted and framed, not only to live, but to enjoy life, every where;—whether he be placed among the fervent plains of *India*, the sandy deserts of *Arabia*, or the snow-clad regions of *NORTH GEORGIA*¹.

The winter of 1821, in England, was extremely mild. The summer and autumn of this year were remarkably wet and unsettled; every little rill became a stream, and the low grounds, marshes: there was no frost even at so late a period as *Christmas day*. All our fields (observes our intelligent correspondent from Gloucestershire) present at this time the verdure of a fine autumn: in a situation by no means particularly sheltered or favourably placed, we have the green-house plants in our borders, in full vigour and flower, though battered and broken

¹ See our last volume, pp. 27, 52, 82, for an interesting account of the *Phænomena and Natural History of the Arctic Regions*.—It affords us much pleasure to be able to state that Capt. Franklin, Dr. Richardson, and the gentlemen composing the *land expedition*, for the purpose of discovering the *North-west Passage*, arrived safely in England in October last (1822), after having endured the severest privations.

by the storms and rain; and *rosa semper floreans*, in all its summer beauty. Even that very delicate plant, so particularly obnoxious to frost, the *potatow* (springing from the remnants of the summer crop) retains its verdure. The *forest trees* are become deciduous by the common provisions and ordinations of nature, rather than from the cold of the season: some creatures have not yet retired to their rest, as is customary upon the approach of winter. The naked race of slugs (*limax agrestis* and *l. flavus*), on account of their visceous covering, are less obnoxious to cold, and are yet crawling about in numbers, or merely sheltered for the day behind some decayed vegetation. The *earth-worm*, which commonly retires beyond the penetration of the frost, is yet feeding near the surface, without any symptom of torpidity. But the snails, particularly *helix pomatia* and *helix aspersa*, being very sensible of cold (particularly the first species), had retired early, having discharged a slimy matter, which soon indurates to a horny hardness, and closes up the mouth of the shell: having no perspirable pores to admit the air, they endure our winters uninjured, behind the shelter of some stump or stone, where they adhere to each other in large bodies. During the whole of these seasons, though the rain poured down almost nightly and daily, yet, at intervals, a most lovely day appeared, in all its exhilarating splendour, the thermometer ranging from 62° to 70°: and all nature presented so cheering an aspect, that we forgot, for a time, the proverbial fickleness of our climate.

The same ingenious correspondent, in a letter of last April (1822), says, ' Our greenhouse plants that were left in the borders have in great measure withstood, uninjured, the whole of our winter and spring months; and large succulent geraniums, in situations by no means remarkably favourable, have retained their foliage, and are now putting out their summer shoots with a vigour equal to those in the shelter of

our greenhouse. Perhaps so mild a winter, and which this last circumstance particularly indicates, has not occurred for a great length of time. The year 1761 is mentioned, by old Peter Collinson, as being remarkably temperate: he says, "the autumnal flowers were not gone before spring began in December with aconites, snowdrops, polyanthes, &c. and continued without any alloy of intervening sharp frosts all January, except two or three nights and mornings: a more delightful season could not be enjoyed in southern latitudes. In January and February my garden was covered with flowers."

The *evergreen trees* with their beautiful cones, such as firs and pines, are now particularly observed and valued. The oak, the beech, and the hornbeam, in part, retain their leaves, and the ash its keys. The common holly (*ilex aquifolium*), with its scarlet berries, is now conspicuous, as is the *pyracanthus* with its bunches or wreaths of *fiery* berries on its dark green thorny sprays; and those dwarfs of the vegetable creation, *mosses*, and the liverwort (*lichen*), now, as in the preceding month, attract our notice, and will amply repay the trouble of examination.

The close of this month, and with it *the close of the year*, will ever afford subjects for serious, and, let us hope, for pleasing reflection. The contemplative man will naturally look around him, and view the surface of the earth so much changed in its aspect, and invested with a sickly and a deathlike character;—but in vain will he seek to discover into what secret recesses are retired those pleasing, and variegated, and multiplied forms, with which were so lately associated our hopes of plenty, our sensations of beauty and beneficence. Amidst all this change of form, this annual passing away, are there no traces of permanency to be found? Is there nothing (observes Mr. Gillespie) that meets our eye, or chal-

lenges our reflection, of which it may be predicated that it remains unchanged in the midst of renewal and decay, that it is uninfluenced by season, that it is the same yesterday, to-day, and for ever? *Yes; those very laws by which the ever-recurring change is regulated are themselves UNALTERABLE.* What occurs at this season, in the kingdoms of animated nature, has occurred of old, and will assuredly still continue to occur;—and whilst individuals are continually perishing, the *immortality of the race* is perpetually maintained. The seeds of many plants, and the eggs of many insects, are now buried in the earth; but, the season of concealment over, and the influence of light and of heat again fully established, and we shall behold (only without surprise, because experience has made it familiar to us) the animal and vegetable kingdoms repeopled; the shell which incrustrated and preserved the suspended energies of life, shall burst; and from the grave of the year shall assuredly reascend every tribe, and species, and variety of animation!

The SEASONS; a Hymn.

By Richard Ryan.

Oft have I seen the laughing **SPRING**
Shed her rich blessings o'er the earth,
While, born beneath her fragrant wing,
Sprung Beauty forth, and Love and Mirth.

But Spring soon fled,—and **SUMMER** then
Her genial heats diffused around,
And Nature's wildest, roughest glen,
Was by her hand with verdure crowned.

Sweet Summer too, alas! was doomed
To quit the rich and smiling plain;
For while in fruitfulness she bloomed,
AUTUMN began her glorious reign.

But Autumn's sun soon ceased to burn,
And clouds, which rolled athwart the sky,
Declared that **WINTER** and his Urn
In viewless, icy car was nigh.

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When Winter came, the gorgeous sun
Turned pale, and seemed to wait his doom;
And all that late so radiant shone,
Now sunk in Winter's joyless tomb.

Thus blooming is life's early spring,
For Nature on each path hath shed
Her smiles, and Pleasure seeks to fling
Her garlands round each youthful head.

My Spring has fled, and Summer now
Rich o'er my youthful cheeks doth breathe;
And soon, to deck this gladsome brow,
Autumn her holiest sweets will wreath.

Yet, ere dim Winter's gloomy birth,
Or age destroys this cheek of bloom,
Oh, I may press my mother earth,
And quit this vain world for the tomb.

Then let me, LORD, at whose command
Summer, and Spring, and Winter roll,
Praise, while I've life; th' Almighty hand
That spans the world from pole to pole.

At morning's light, LORD of all space,
I'll praise thee, and at close of ev'n;
Then lend me, LORD, some ray of grace,
To light my trembling steps to Heav'n.

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2. The Grasshopper
3. Mazarine-blue Butterfly.
4. Slender-bodied Dragon-fly.

Fig. 5. Golden Chrysis.
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